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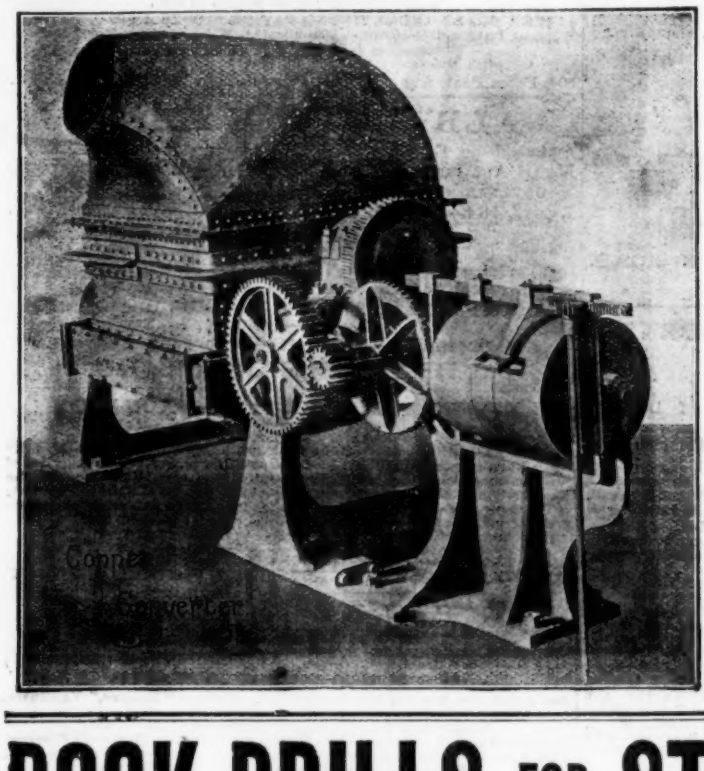

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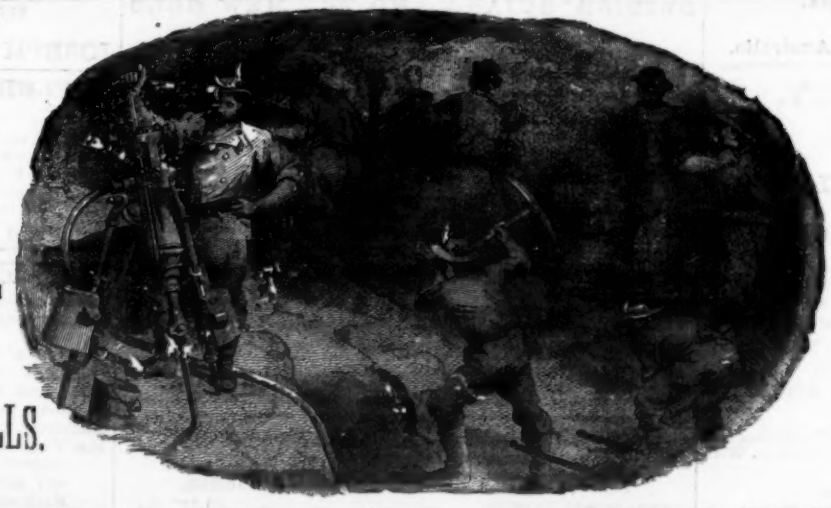

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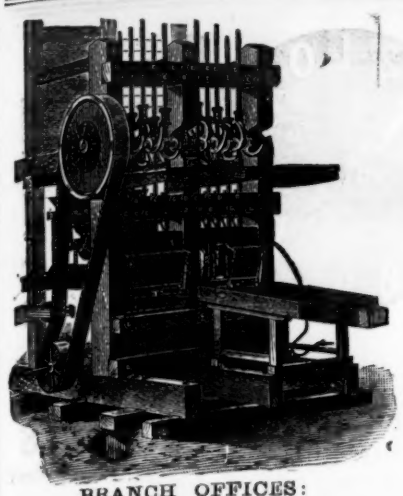

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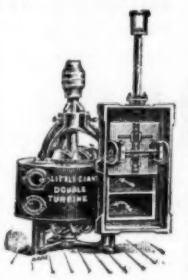
FACTS!



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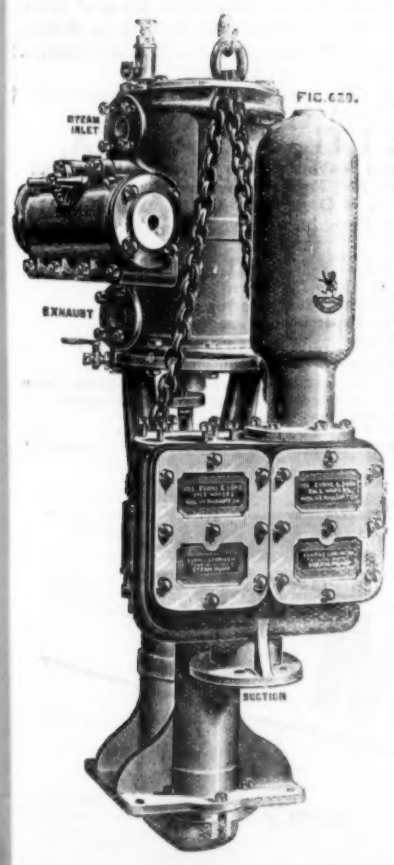
"EVANS and TONKIN'S" Patent "CORNISH" SINKING PUMPS have been used on all the recent modern sinking operations of importance, including

North's Navigation Collieries, the Blackwall Tunnel, the Barry Dock Extension, the Griff Colliery Sinkings, the Coppice Colliery, the Fishley Colliery, the Moss Hall Colliery, the North Walbottle Colliery, the West Hallam Colliery, and other large Sinkings, also North Wales, Rand, West African, West Australian, Victorian, South American Gold Mines, &c., &c.



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London Office
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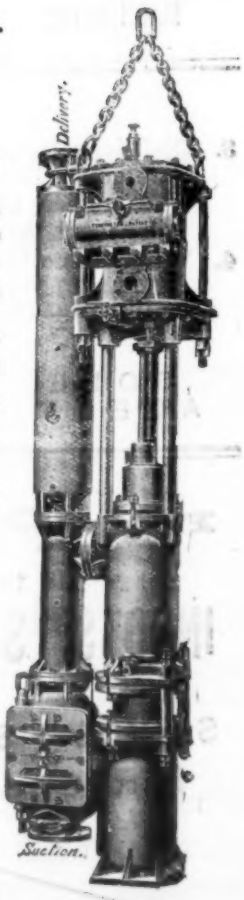
DEPOTS:
NEWCASTLE-ON-TYNE,
GLASGOW, WAKEFIELD,
MANCHESTER,
CARDIFF, and BELFAST.

JOHANNESBURG.
Etc.

FIG. 875, "FLUOMETER" PATENT STEAM VACUUM PUMP.

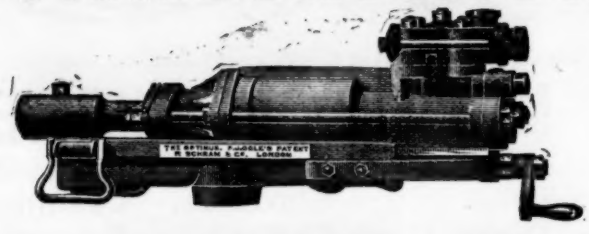
The "CORNISH" STEAM PUMP.
The "DUPLEX" STEAM PUMP.
The "RAM" STEAM PUMP.
The "RELIABLE" STEAM PUMP.
DONKEY PUMPS.
HORSE PUMPS.
POWER PUMPS.
AIR COMPRESSORS,
&c.



"STRAIGHT-LINE" PATTERN SINKING PUMP.

CULWELL WORKS,
WOLVERHAMPTON.

REVOLUTION IN ROCK DRILLING



"OPTIMUS" COMPOUND ROCK DRILL.

(P. J. OGLE'S PATENT.)

Consumes 40 per cent. less Compressed Air than any other Drill at the same time giving the most effectual results.

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WITH COMPOUND AIR AND STEAM CYLINDERS,

Fitted with SCHRAM'S Inlet and Outlet Valves giving the greatest efficiency.

"SCHRAM'S" IMPROVED ROCK DRILLS,

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2500 IN USE IN ALL PARTS OF THE WORLD.

Hand-Power Diamond Prospecting Drills.

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1. Chilled Cast Iron, Cast Steel and Malleable Iron Articles.
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GOLD EXTRACTION MACHINERY.

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STAMP BATTERIES.

Patent Ball Mills.

(Dry Crushers.)

ORE CONCENTRATION

DRY SEPARATOR

OF

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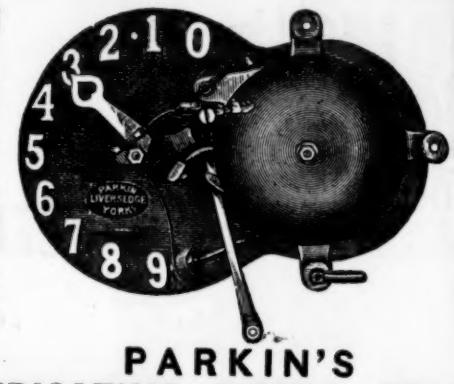

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Are a SURE SAFEGUARD for Enginemen against winding without signal.

The Index stands at 0 till the signal is given, when it points to the number of strokes on the Bell.

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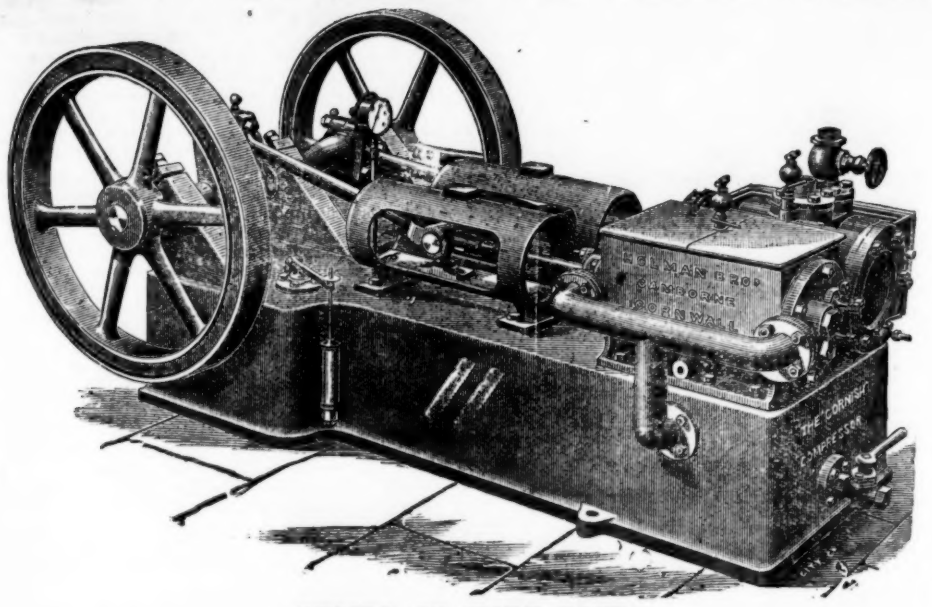
"THE CORNISH" ROCK DRILL and "THE CORNISH" COMPRESSOR.



RECORD OF WORK DONE

At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour

At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by **6 FEET PERPENDICULAR RISE 46 FATHOMS 5 FEET 6 INCHES**, and about midway drove **1 FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

Estimates for ROCK BORING PLANT and GENERAL MINING MACHINERY on Application.

London Offices: 7 and 9, LEADENHALL BUILDINGS, E.C.

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118, NEWGATE STREET, LONDON, E.C.
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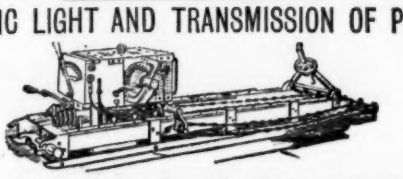
ELECTRIC LIGHT AND TRANSMISSION OF POWER.



Jeffrey Machines for Undercutting Coal,
WORKED EITHER BY COMPRESSED AIR OR ELECTRICITY.
OVER 600 IN DAILY USE.

ELECTRIC BLASTING APPARATUS.
HIGH OR LOW TENSION
EXPLODERS
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Electric Signals and Telephones.

MINING AND SURVEYING INSTRUMENTS,
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CLINOMETERS.

MINERS' SAFETY LAMPS.
ALL PARTS INTERCHANGEABLE.

CATALOGUES UPON APPLICATION.
SEC. A. MATHEMATICAL & MINING INSTRUMENTS, MINERS' LAMPS, &c
SEC. B. ELECTRICAL PLANT AND STORES.

WATER-POWER.

TURBINES OF ALL EFFICIENT TYPES.

Hett's Patent Pelton Wheels.

CHAS. LOUIS HETT,

HYDRAULIC ENGINEER,
BRIGG, ENGLAND

AWARDS: CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

CONCENTRATION.

The Clarkson-Stanfield Ore Reduction Co. (Limited).

In the CLARKSON-STANFIELD process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

OUTPUT ½ TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.

CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS,

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The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, ana may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carndochan Mine, near Bala, North Wales, will, by arrangement, show their CLARKSON-STANFIELD plant working on a Refractory Low Grade Gold Ore.

NEW PATENTS.

LIST of APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

16585 Wallace McGuffin Greaves, Kersal Dale, Manchester.—Improvements in appliances for the prevention of smoke from furnaces.—July 27.
16630 Andree Beetz, 11, Southampton Buildings, Chancery Lane, London.—Improvements in rotary explosion engines or motors.—July 27.
16633 John Fielding Upton, St Leonards, Glos.—An improved construction of the cylinders of internal combustion engines.—July 28.
16660 Thomas James Bennett and Walter Frederick Thomas, 12, Cherry Street, Birmingham.—Improvements in gas, oil, and spirit engines.—July 29.
16667 Edgar Beverley Fenby, Copsley Hill, Eccington, near Birmingham.
16718 Henry Harris Lake, 45, Southampton Buildings, Chancery Lane, London.—Improvements in and relating to valves for steam engines, pumps, and the like.
16759 Donald Barns Morison, 46, Lincoln's Inn Fields, London.—Improvements in stamp mills or apparatus for crushing ores and other substances.
16774 Edward Martin and Andrew Stapley, Sugar House Lane, Stratford, London.—Improved means for and method of conveying and distributing heat to the contents of such as stills and the like.
16954 Thomas Thomas, 1, Furnival Street, Holborn, London.—Improvements in and relating to miners' safety lamps.
17106 Franklin David Cummer, 191, Fleet Street, London.—Improvements in the construction and working of furnaces adapted amongst other purposes for use with apparatus for drying materials of various kinds.
17130 Leon Bemelmans, 45, Southampton Buildings, Chancery Lane, London.—An improved process of and apparatus for facilitating the burning of poor coal and the like, chiefly applicable for use in gas producers.

SPECIFICATIONS PUBLISHED.

16157, Clubbe and Southey, internal combustion engines; 16795, Blanc, apparatus for preventing the escape of steam from steam boilers in case of rupture of steam pipe and applicable to other vessels containing fluid under pressure; 18070, Norris and Henty, valve gear for gas, oil, and other engines; 1837, Johnston, gas and petroleum engines; 22856, Furse, water tube steam generators; 1203, Kirkham, crucible melting furnaces; 12778, Schneider, steam valves.

The above specifications published may be had of Messrs. Rayner and Co., 37, Chancery Lane, London, at 10d. each, including postage.

COAL AT FLINDERS BAY.—The search for coal in the vicinity of Flinders Bay, at the mouth of the Blackwood River, Western Australia, continues to attract a good deal of attention. Fresh applications for prospecting areas have been received by the Mines Department within the last few days. The operations at present are confined to the basin of the Scott River, which runs parallel with the south coast at a few miles distant from it, and joins the Blackwood almost opposite the township of Augusta, near the mouth.

JOINT-STOCK COMPANIES.

NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:—

Arcadia Gold Mines (Limited).—Registered July 28 by Budd, Johnson, and Jacks, 24, Austin Friars, E.C., with a capital of £120,000 in £1 shares, to acquire any mines, mining rights, &c., in Australia. Registered office, Copthall House, Copthall Avenue, E.C.

London and West Australian Syndicate (Limited).—Registered July 25 by H. D. Kimber and Co., 79, Lombard Street, with a capital of £1 0,000, in £1 shares, to adopt and carry into effect an agreement expressed to be made between the London and West Australian Syndicate Limited), Howard Childs Parkes and E. Hart of the one part, and this company of the other part, for the acquisition, by purchase or otherwise, as a going concern, now and hitherto carried on by the London and West Australian Syndicate (Limited). Registered office, 8, Old Jewry, E.C.

Tees Side Bridge and Engineering Works (Limited).—Registered July 25 by Holiams, Sons, Coward, and Hawkesley, Mincing Lane, E.C., with a capital of £50,000 in £5 shares—5000 preference and 5000 ordinary—for the acquisition of the goodwill of that portion of the business carried on by the Tees Side Iron and Engine Works Company (Limited), of Middlesbrough.

New Zealand and Globe Exploration Company (Limited).—Registered July 27 by R. Jessop, 5, Frederick's Place, Old Jewry, with a capital of £10,250 in 40,000 5s. ordinary and 1000 1s. deferred shares. To carry on all kinds of exploration business, particularly in relation to mines. The directors are J. B. Martin, P. D. Henderson, and J. B. Guthrie. Qualification, 100 ordinary shares. Remuneration, as fixed by the company. Registered office, 4, Great Winchester Street, E.C.

London and West Australian Syndicate (Limited).—Registered July 25 by H. D. Kimber and Co., 79, Lombard Street, with a capital of £100,000 in £1 shares, for the acquisition as a going concern, of the business now and hitherto carried on by the London and West Australian Syndicate (Limited) in London and elsewhere. Registered office, 8, Old Jewry, E.C.

Great Boulder Junction Reefs (Limited).—Registered July 21 by Edwin Andrew and White, 27, Clements Lane, E.C., with a capital of £175,000 in £1 shares, to acquire any mines, mining rights, protected areas, ores, minerals, tailings, concentrates, alluvial deposits, forests, &c., in West Australia. Registered office, Worcester House, Walbrook, E.C.

Oriental Norseman Gold Mines (Limited).—Registered July 24 by Williams and Neville, Winchester House, E.C., with a capital of £100,000 in £1 shares, to acquire two mining blocks, numbered 69 and 70, known as the Oriental Blocks, and also the two adjoining blocks known as Nos. 3 and 4, Oriental Blocks, situate in the Norseman or Dundas District, West Australia.

MORE RUBY MINE DISCOVERIES.—According to the Indian papers an important discovery of ruby mines was recently made in the Kadur district of Mysore province by Government. It would appear that Dr. Clarke as far back as 1802 wrote that ruby mines existed in Burma and Mysore, and Sir K. Seshadri Iyer, Dewan of Mysore, has for some 10 years back been trying to discover the whereabouts of the Mysore mines, with the above results. Samples have been submitted to Messrs. Streeter, the jewellers of Bond-street, London, who have reported favourably on them. It is not known yet what the Government contemplate doing in the matter.

CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

*** *We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.*

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

Pump, August 18 (*Oldham*).—For the supply of an electrically driven feed pump capable of delivering 2000 gallons of water per hour against 125 lbs. steam pressure for the Electric Lighting Committee. Specification and form of tender may be obtained on application to Mr. Arthur Andrew, Gas and Water Offices, Oldham, to whom tenders are to be sent by the 18th inst.

Coal, August 20 (*Llanelly*). For supply of gas coal during year ending September 30, 1897, for the Llanelly Gaslight Company. Particulars and forms of tender may be obtained on application to Mr. Frank Vivian, manager and secretary, and tenders, sealed and endorsed "Tender for Coal," addressed to the Chairman, must be delivered by 2nth inst.

Engineering August 20 (*Egremont, Cheshire*).—For lining out the present borehole of No. 1 well at Poulton Waterworks, and boring a further depth of 300 feet, for the Wallasey Urban District Council. Specification may be seen, and form of tender and any other information obtained on application to the engineer, Mr. J. H. Crowther, Gas and Waterworks, Great Float, near Birkenhead. Sealed tenders, on the form provided for the purpose, addressed to the Chairman of the gas and water committee, and endorsed "Tender for lining-out borehole, &c.," to be delivered at the office of Mr. W. Danger, clerk, Public Offices, Egremont, by 4 p.m. on August 20.

Coal, August 24 (*Beverley*). For supply of coal for 12 months from the October 1, to be delivered as from time to time directed by and at the expense of the contractors f.o.b. at Keadby, or at the pits, or at the railway station, Beverley, according to terms of contract, for the Gas Committee. Further information may be obtained of gas manager, Mr. James Gibson, at the Gas Works, Beverley, and tenders, endorsed "Tenders for Coal," must be delivered at the office of Mr. J. Willis Mills, Town Clerk, Guildhall, Beverley, by the 24th inst.

Railway Trucks, September 2 (*Christiana*).—For the supply of 30 open goods wagons. Application to the offices of the Norwegian State Railways at Christiana.

Pipes September 7 (*Vitré*).—For the supply and laying of cast-iron water pipes (nearly £10,000) for the Waterworks. Application to the Mairie of Vitré, Ile-et-Vilaine.

Rolling Stock, September 8 (*Karlsruhe*).—For the supply of about 54 railway carriages of various classes, and 400 goods wagons, for the Direction der Staatsbahnen, Karlsruhe, Baden.

Coal, October 13 (*Port Louis, Mauritius*).—Tenders will be received at the Treasury, Port Louis, Mauritius, until noon on October 13, for the supply of 1400 tons of South Wales and 4575 tons of Australian coal, for the use of the Railway and Port Departments. Printed forms of tender and conditions of contract may be obtained on payment of 2s. on application at the office of the Crown Agents for the Colonies, Downing Street, London.

Railways, October 31 (*Sofia*).—For the construction of a railway between Nova Zagore, Chirpan, Philippopolis, Tatar Bazarjik, and Sarembeg. About 120 miles. Estimate £332,000. Particulars from the Ministry of Public Works, Sofia, Bulgaria.

NOTES ON THE HANDLING OF SLAGS AND MATTES AT SMELTING WORKS IN THE WESTERN UNITED STATES.*

By WILLIAM BRADEN, Helena, Montana.

(*Concluded from Page* 1017.)

So far as obtaining clean slag is concerned, this latter system of fore-hearth works more satisfactorily than the style used on furnace No. 1, and does away with the use of the settling pot. The design was recommended by Dr. E. D. Peters, jun.

At the lead furnaces the molten material is run into Devereux pots, which are wheeled on to grates, covering in front of the lead furnaces the cut into which are run the slag trucks. The plug of clay in the Devereux pot is punched out, allowing the slag to flow through an opening in the grates (18 by 6 inches) into one of the pots in the cut. Then this Devereux pot, containing lead matte, and the small amount of slag left in the pot below the hole, is wheeled right on over the grates to the culling-ground beyond, and, when cool enough, its contents are dumped. The matte and slag are then separated, the matte being loaded into Thatcher dumping cars, conveyed to the crusher, roasted and slagged, and finally retreated in the matting furnaces. The slag, if "dirty," is conveyed to the furnace floor, and retreated; if not, it is thrown over the dump.

The matte made in the lead furnaces at a large custom smelter of this kind necessarily varies in amount; so the hole in the Devereux pots used is made high up on the front side of the pot. In front of each opening in the grating over the cut is a small wrought-iron step-like arrangement, by the use of which under the "rest" attached to the handle of the pot the flow of slag may be regulated, according to the amount of matte being made. If a very small amount, the "rest" of the slag pot is placed on the highest step. When all the pots of a train in the cut are filled with slag, a small locomotive conveys them 400 feet or more to the edge of the dump, where the slag is thrown over. The locomotive immediately places another train of empty pots in the cut.

Since the above was written concerning the system of slag-manipulation at the Arkansas Valley works, Mr. R. D. Rhodes has constructed there a reverberatory hearth, into which the slag and matte are run from the blast furnaces; and by keeping up a slight heat in the fire place of this hearth, a separation of slag and matte is said to be economically effected.

The American Smelting Works.—At these works, in Leadville, Colorado, a branch plant of the Aurora Smelting and Refining Company, the slag from seven lead furnaces is granulated, as is likewise most of the matte made. The molten material is tapped from the furnace into a settling pot. A portion of the matte settles in this pot, and that which does not, overflows with slag into a second, somewhat smaller, settling pot. From this the slag overflows into a jet of water, under 20 lbs. pressure, in which it is granulated and sluiced away. When the second settling pot is full of matte it is replaced with an empty one, and hoisted to a suitable point, and the matte is granulated, the granular particles falling into storage bins, from the bottom of which the stock is drawn out when desired into tramcars and conveyed to the roasters.

The Consolidated Kansas City Smelting and Refining Company.—The main works of this company are at Argentine, Kansas. Here slag is handled in somewhat the same way as at the works in Leadville, with the exception that the Argentine slag, instead of being thrown away, is sold to the railroads as ballast. The molten material is run from the furnace into Devereux pots, which are wheeled to a cut somewhat similar to that described at the Arkansas Valley Works. Into this cut are run slag trucks, which, however, carry, instead of conical pots, rectangular cast-iron boxes. When a train of these boxes is ready for the slag to be tapped into them, a wrought-iron pronged eye-bolt, 1½ inch in diameter, is placed in the middle of each box, the eye extending about 4 inches above the top of the box. When all the boxes on the trucks have been filled with slag, a small motor side tracks the train and puts another train of empty boxes in the cut. After the slag in the boxes has cooled sufficiently, a small travelling crane picks up one cake of slag after another by means of a hook inserted into the eye of the pronged eye-bolt, and deposits the same in front of a crusher. The cakes are broken up with hammers, the eye bolts are withdrawn, and the slag goes through the crusher and is loaded on railroad cars ready for use as ballast.

The Omaha and Grant Smelting Company.—At the works of this company in Omaha, another adaptation of the Devereux system is in use. The molten material is tapped into the Devereux pots from the blast furnaces and allowed to stand long enough for as complete a separation of slag and matte as possible. About 75 feet in front of the furnace building, and centrally located, is a contrivance which handles, very ingeniously, the slag as tapped from the Devereux pots. It consists of a circular pit about 35 feet in diameter, and filled with water, upon the outer zone of the surface of which an annular disk of cast iron plates about 2 feet wide and 1¾ inch thick, and slightly trough-shaped on the top, is made to revolve. This disk is supported partly by radial arms from a pillar in the centre of the pit and partly by rollers attached to the plates underneath, and travelling on stationary plates which are in turn supported by pillars around the circumference of the pit. Revolution is effected by means of a rack on the periphery of the disk. A constant stream of cold water is run into the pit, and an outlet is provided for the heated water, the supply being so regulated that the water shall not overflow the trough-shaped surface of the disk, but the lower side of the plates, with the rest of the mechanism, shall be constantly immersed in cold water. The apparatus makes one revolution in five minutes.

A Devereux slag pot having been wheeled to the edge of the pit, the slag is tapped, first striking a cast-iron plate fixed at an angle of about 60° from the horizontal, to prevent the undue scattering of the slag, which passes through upon the revolving trough-shaped disk. On this it spread out, covering the plates to the depth of ¼ to 1 inch, according to the amount of slag being made. From the molten state in which it was tapped from the pot, the slag cools gradually on those water-cooled plates, until at the end of a revolution it is quite brittle. A piece of ½ inch steel is set diagonally across the revolving plates in such a manner as to break up the slag, and force it on to a conveyor, which takes it up into bins, from which it is loaded on railroad cars. It is of such size and structure as to be of superior quality for the purpose of ballast, being square or rectangular in shape, from ¼ to 1 inch in thickness, and from ½ inch to 4 inches in surface area. This arrangement was designed by Mr. Pace, the superintendent at these works.

The Hanauer Smelting Works.—At these works, near Salt Lake City, Utah, silver-lead ores are concentrated in blast furnaces. A sluice carrying water under pressure is run under the floor in front of the furnaces. The slag and matte are tapped periodically from the furnace into settling pots; the slag overflowing into the sluice is granulated by the stream of water, and carried to a pit or "boot," whence it is hoisted by a belt elevator into bins, from which it is loaded on railroad cars to be used for ballast. The matte and the small amount of adhering slag in the settling pots are culled and handled in the usual manner.

Slag Tiles.—As a matter of particular interest, I will briefly describe, in conclusion, a successful manufacture of slag tile from blast furnace slag, invented by Mr. Marco Chéapponi, E.M., which I saw in operation at the smelting works of Senor Concha i Toro, about 15 kilometers from Santiago de Chili.

The slag and matte are tapped from the blast furnace into a slag pot, and, after settling a few moments, the slag is poured from ladles into moulds (6 by 1 inch each); these are placed on a hearth which has a movable cover; the moulds being filled with slag, a cover is placed on them, as well as on the hearth. A very light heat is kept up, so that the slag is very slowly cooled; and when it appears black, the moulds are lifted from the hearth and the slag tiles are dumped into cold water. The slag tiles thus made are light and portable, and, when laid, tough and durable. A slag carrying a considerable excess of iron has been preferred. These tiles are sold for from $30 to $60 (pesos Chilenos) per 1000.

It is generally known that it is impossible under ordinary circumstances to make tiles of such dimensions as are mentioned above, without some extraneous means for toughening. Though, at other establishments than those spoken of, I have observed somewhat altered details in the system of slag and matte manipulations, I believe this paper covers essentially my purpose, which was to describe the main features of our Western practice.

* A paper read before the American Institute of Mining Engineers.

THE COOLGARDIE GOLD FIELDS.

By VICTOR HANSARD YOCKNEY, A.M.I.C.E. and M.E.

(*Concluded from page* 1011.)

THE auriferous patches and reefs run irregularly in shape, size, and direction, but can always be readily traced by the fragments of the quartz and ironstone lying on the surface. From these indications one soon learns how to look for the outcrop of the reefs, which is generally above the surface. I should now like to describe the various formations or reefs gold is chiefly found in, which differ much in various centres. They may be generally divided into two, and these again re-divided:—

1st. We have often a marvellous rich surface show, with rich chutes of gold in a reef of generally white buck quartz. The character of these reefs is to have the gold in patches of great richness. Such is the Londonderry, and some others. These often peter out at depth by intrusion of country rock. Phenomenally rich patches may be met with at any time, but these veins do not go down in depth, or improve in value at depth.

2nd. Then we have the true fissure lode carrying gold right through. These are often of good width and length, with well-defined walls. The gold in these reefs is often not visible, the assay, however, of poor looking quartz giving wonderful results.

At Hannan's, where the gold is found not only in the quartz reefs but in the lodes, it is sometimes difficult to decide which is lode and which is not. In most countries quartz is looked upon as the matrix, but at Hannan's gold and iron have an extraordinary affinity for one another, and there is a kind of conglomerate, consisting of schists and iron running between well-defined walls, carrying gold. The main line of these lodes has been proved to be of great richness, though showing little visible gold, except where a rich patch occurs, and these have been found to run for miles. There is little doubt in my mind this place, although others may be found later on to equal it, will give the largest output, and be the richest patch of country in, perhaps, the whole world.

Then, again, at White Feather and the 25-Mile, we have what is known as the cement deposits. This auriferous deposit consists of sharp-edged quartz grains from the decomposed country formations and of clays of variegated colourings. The gold occurs embedded in the matrix, often visible to the naked eye. These deposits have been declared by Mr. Goszel, the late Government Field Geologist, to lie between the surface gold deposits and the reefs, and that it would be a difficult matter to draw a practical line of distinction between the two joint occurrences and the gradual transit that produce them. I have mentioned them because in the future they will hold a place of their own as a gold producer of value, though perhaps at first there will be a difficulty in treating the ore.

Permanence.

Little has been done yet to prove the permanence at depth of the mines, nor has there been much time or inducement for mineowners, with the terrible cost of working, to try for a depth.

The Government of New South Wales have just offered a reward of £1000 for the discovery of gold at a depth of not less than 2000 feet. Why does the West Australian Government not offer some such bonus—(say) £1 for a foot? Up to the present the deepest shaft on these fields is Bayley's Reward. It is down some 466 feet. The deepest shaft in New South Wales is 600 feet, and yet during the last three years this colony, the first to discover gold, through the Government policy of encouraging mining, has increased her output nearly 40 per cent., mainly from the Wentworth and Wylalong field.

In Bendigo they have one mine on payable gold at a depth of over 3300 feet, while in Queensland the reefs have been proved below 1400 feet.

Why should this not be thus in West Australia? While the expenses of labour, mainly through the water question, are so heavy, it is not likely managers will care to go to the expense of sinking to great depths to prove the fissure lodes until assisted by the Government, but time will, of course, cure this neglect on the part of the Government, and the sooner they realise the future of the colony depends on the proved permanency of the gold-bearing reefs the better for everyone.

And now we come to the most important question of all—the water supply. Gold there is in great quantities, but water we must have, not only for domestic uses, but for treating the ore, especially as a great many of the reefs are low grade, and, therefore, require more water in proportion to win the same quantity of gold. However, it may be eventually decided which is the best way to treat ore without any great loss; water must be used either in a greater or less quantity. Dry crushing is not in favour by practical men on the fields, and can hardly have been said to be a success as yet. The Brownhill, instead of putting through 30 tons a day, could only manage 8 tons. A great deal of the ore at Hannan's is soft, not what is called free milling. At the Great Boulder they are now trying using warm water over the plates, the density and small supply of the salt water being a difficulty.

This question is, at last, being taken up by the Government, and none too soon. They apparently have only just realised gold is in the country in payable quantities, or years ago they should have made a beginning to make due provision. I do not wish to decry the Government, for I think, considering everything, they have done great things, but in two ways they have shown a terrible want of competence, and those are the telegraphs which are a disgrace to any country, and provision for water, not only for human consumption, but for mining. The water question remains, and is the great barrier of progress—it is the great trouble—the seriousness of the water difficulty, and the vast importance to the colony of devising some scheme to, somehow or other, overcome it, is brought vividly home to any one who has visited any of the big mines on the fields. Some have a limited quantity, just enough to keep their batteries going intermittently, others have none at all. The uselessness of erecting batteries when there is insufficient water to feed them has been for a long time past fully recognised by mine owners, and this feeling is bound to continue to a more or less extent as long as the difficulty remains unsolved. As a well-known mine manager at Hannan's said recently:—"There is not much good putting through even good stone with the great cost of working," meaning cost of obtaining water. The rainfall is only about 10 inches a year, and this is only caught as fresh water in a few rock holes in or near some granite outcrop, and this supply is soon exhausted. Spread over the country are what are called lakes; these are of considerable area, but very shallow, and the bottom is covered by a saline efflorescence. When the rain comes, the water running off the hills finds its way into these lakes, and owing to their shallowness speedily becomes very salt, and before very long evaporates; then you find it in diminished quantities and even denser than ever by sinking at or near these lakes. This supply is very limited. The salt water thus obtained contains much more salt than sea water by nearly 80 per cent.

It seems pretty generally admitted that owing to the peculiar formation of the country artesian water boring, as in Queensland, would not obtain here, but I think the Government should have tried a series of bores in different parts of the country, say to a depth of 500 to 1000 feet, when I feel sure the present supplies, even if salt, would be augmented. At Coolgardie, recently, they have struck at about 200 feet a fresh water supply, but this is very small and rather brackish, and very likely would not be obtainable elsewhere. Another precaution the Government have been very slow over, and that is to make sufficient dams to catch the rain water.

Last March I saw 2½ inches of rainfall at Coolgardie in two days' continuous rain, while at Kanowna 7½ inches fell, and at Menzies 5 inches in this short period, and yet the water was running to waste everywhere; the dams did not hold it, even if the water ran into them, and anything more heartrending than to see all this precious fluid running away is hard to conceive. No one, not even the mine managers, know how to make a dam watertight, and after all this rain fell there was scarcely a dam which had more than a foot or two of water in it. Clay is to be found in nearly every district if it is only looked for, and it would be a comparatively easy thing, and when the eventual cost is taken into account a comparatively cheap one, to make these dams watertight. I believe the supplies of water can be easily increased by properly constructed reservoirs; the country lends itself to these geographically by its gentle undulating hills and valleys.

There will also be found traversing the country north and south, and east and west, a chain of natural depressions and lakes, formed between and above the granitic rocks. The Government should survey the contour of those, and then take in hand their proper puddling. Large lakes which would hold fresh water could thus be formed, and I am certain by this means the water difficulty would be nearly, if not quite, solved. I believe at Broken Hill, in the early days, the same difficulties were experienced as now, and overcome simply by proper surface conservation.

I am in favour, too, of a scheme for bringing sea water (say) from Esperance; this would be nearer than Fremantle, and this water would be very suitable for battery purposes. I think such a scheme is quite practicable, and in view of the uncertainty of the rainfall, and looking at the country, one cannot forget that at times it must be little, indeed, and would be a good thing. A scheme of this kind would supply the centres well, and the lakes would do the rest.

In conclusion, the English public who have put their money so largely into this country must insist on this great necessity being dealt with, and until it is they must look for little return for the money they have already invested. True, the few mines have done well, but how much better they would have done if the cost of working, which is the cost of water, had been less. The Great Boulder have now turned out nearly 1¼ ton of gold, averaging 5 ounces to the ton. Lake View has produced ½ ton, averaging 2 ounces 15 dwts., and Frasers 26,583 ounces from 42,977 tons. These figures speak for themselves as demonstrating the presence of gold, and are somewhat cheering, but—the output should be now advancing by leaps and bounds, not retrogressing. The gold is there without a doubt, unless everyone who can speak with any authority has gone mad, and in many places such as Hannan's, Menzies, Mount Malcolm, and one or two others, in wonderfully rich deposits, and all that is wanted is water, and it will be curious if English people, with their well-known pluck and enterprise, do not solve this question one way or another, and so prove again to the world that a white man will not be beaten, however difficult may be the task that is set before him.

TIN TICKETING.

THE fortnightly ticketing for tin ores was held at Tabb's Hotel, Redruth, on Tuesday. Results:—

VALUES OF ORES SOLD BY EACH MINE.

Mines	Tons	cwts.	Per ton. £	s.	d.	Value. £	s.	d.
Dolcoath No. 1	14	0	36	15	0	514	10	0
do No. 1a	14	0	37	0	0	518	0	0
do No. 1b	12	0	37	5	0	447	0	0
Wheal Grenville a	16	0	38	7	6	614	0	0
do b	12	0	38	2	6	457	10	0
do No. 2	4	0	23	7	6	93	10	0
Carn Brea and Tincroft a	14	0	34	12	6	484	15	0
Mines (Limited) a	14	0	34	17	6	488	5	0
do No. 2	1	0	19	7	6	19	7	6
Basset (Limited)	20	0	38	10	0	770	0	0
Levant	18	0	40	0	0	720	0	0
East Pool a	7	0	25	15	0	180	5	0
do b	6	0	25	12	6	153	15	0
do No. 2	1	0	11	0	0	11	0	0
West Kitty	13	0	38	15	0	503	15	0
Phœnix United	10	0	37	15	0	377	10	0
Killifreth	9	0	34	17	6	313	17	6
Wheal Kitty	9	0	38	17	6	349	17	6
South Condurrow	5	0	38	17	6	194	7	6
	199	0				£7211	5	0

AVERAGE PRICE PER TON, £36 4s. 9d.

AVERAGE PRICES PER TON.

June 30	£35 9 10	July 28	£35 10 2
July 14	36 13 6	August 11	36 4 9

VALUE OF ORES PURCHASED BY EACH FIRM.

	Tons.	£	s.	d.
Carvedras	40¼	1827	6	8
Chyandour	50½	1877	1	8
Williams	27	934	5	0
Redruth	17¾	647	8	4
Penpoll	13¾	486	10	10
Cornish	41	1478	12	6
	199	£7211	5	0

The HAURAKI SOUTH GOLD MINING COMPANY (LIMITED) has received, through the Bank of New Zealand, notification to this company has now been completed.

ROYAL COLONIAL INSTITUTE.—We have received a copy of Vol. 27 of the Proceedings of this Institute, and, as usual, the volume is replete with highly interesting and instructive matter.

THE "WILD WEST COAST" OF TASMANIA.

By F. E. HARRIS, M.A.I.M.E., M.I.M. and M., London

(*Concluded from page* 1011.)

EIGHT miles uphill, the first three steep and over slippery corduroy, brought us to Mount Reid, and among the mines of that locality. After a cursory glance over the Mount Reid Mine itself, where matters are improving, both as regards quantity and quality of ore, and at the surface workings, from which it is stated nearly 2000 ounces of gold were obtained, we have an early lunch, and proceed about another mile or so to our destination, Barlens and the Hercules Mines. These are situated on the slope of a high hill, and there are three strong lodes already proved running through them. The ore is a heavy sulphide carrying fahlerz, and is rich in silver and gold, as the following results will show.

The Hercules has despatched the following parcels of ore for the splendid net returns attached :—

Weight.				Gold contents.			Silver contents.		Net return.		
Tons	cwts.	qrs.	lbs.	Ozs.	dwts.		Ozs.		£	s.	d.
0	16	1	15	16	0	..	255	..	70	9	3
1	9	2	21	20	13	..	255	..	154	7	7
0	17	1	0	8	9	..	261	..	82	7	6
0	19	0	19	14	14	..	225	..	68	19	6

The last parcel also contained 9 per cent. lead.

From 60 to 70 tons of other ore, ranging in value from £25 to £70 per ton, has also been sold, and the mine has paid its way from the first despite heavy expense incidental to a new district, such as packing ore to Zeehan at £4 per ton.

Barlens has not as yet sold or despatched any ore, but the following assays show how valuable the deposits are :—

708 ounces silver, 9 dwts. gold.
1700 ounces silver.
918 ounces silver, 3 ounces 0 dwts. 2 grains of gold.
57 ounces silver, 7 dwts. 10 grains gold.
200 ounces silver, 2 ounces 9 dwts. gold, 5½ per cent. copper.

The lodes which traverse both mines are large, having been proved to 45 feet thick on the Hercules and over 35 feet on Barlens. Possessing large bodies of ore, cheaply mined by means of tunnels, with any quantity of splendid timber and water on the ground, the success of these two mines is assured. The Hercules is a Launceston company, and its shares are in great demand locally, while Barlens is about to be formed into a company in Melbourne as the Barlen-Hercules.

Standing on the workings of these mines, and looking west, the valley of the Ring River is seen below, while in the distance and about two miles away, the workings of the Curtin and Davis are plainly visible on the side of a steep hill. The ore in this mine is of a similar nature to the above mines, but carries more copper and less gold, and is very rich. The Colebrook Hill can also be seen some three miles away. This is an immense body of copper ore, carrying silver and gold, and is destined to be heard of in the near future. It has already been driven across for 80 feet without both walls being found. The ore carries a considerable amount of axonite, and will, therefore, smelt readily. The Gormanston Tin Mine is also close by. Here immense blocks or "slugs" of almost pure tin oxide have been found, some of them weighing close on a ton. From their rugged appearance they had evidently not travelled far, and the lode from which they come, when found, should be a valuable one. Finding lodes in this country is, however, no easy task on account of the dense scrub and overburden of peat and other vegetable matter. The hill is said by the Government Geologist to resemble Mount Bischoff in its geological features.

Along the banks of the Ring some thousands of ounces of alluvial gold have been obtained, which has no doubt been shed from the lodes on the hills above. Many other good lodes have been located in the vicinity, which will be vigorously worked as soon as the Zeehan-East Dundas Railway is finished. The terminus of this will be only a short distance from the mines above-mentioned, and there is already sufficient evidence to show that it will be a busy line, and that there will be a large and prosperous population in this rich district.

The return journey being down hill is much easier, and when half way a good view of the town of Zeehan is obtained, lying about 2500 feet below us and some 10 miles away. The country is all the same, mountains and valleys, immense trees, dense undergrowth of ferns, &c., with running streams almost every few hundred yards.

After a good tea, which we find waiting us at the Comet Hotel, Dundas, we catch the train again, and get back to Zeehan about 9.30 p.m., having had a long and fatiguing day. The walk was fully 20 miles, equal to considerably more on a good road, and being wet-footed all day does not tend to make one not accustomed to it feel any too comfortable. Colds are, however, scarce, we find, and beyond being a bit stiff in the morning, no ill effects are experienced.

Great improvement has taken place in many of the Zeehan and Dundas mines during the last few months, notably at the Comet, Silver Queen, Montana, Oonah, and the quantity of silver lead ore being despatched is surely and steadily increasing.

The Comet is the leading Dundas mine, and is now paying well. The concentrating plant lately purchased will largely add to the output, and the mine should soon be on the dividend list. It has a very fine pumping plant, and is being most energetically and systematically worked.

The West Comet, recently floated, also looks well, and bids fair to be a large ore producer, while Kosminsky's and others in the locality are promising properties.

The Silver Queen has been a most consistent ore producer, has paid a number of dividends, and is now looking better than ever. The company is re-erecting its concentrating plant, and the output will soon assume much larger proportions.

The Oonah and Montana have both been large producers, and more than paid their way, while many other mines are being worked on tribute or in a small way by co-operative parties and small companies, but in most cases are crippled for want of working capital. This, however, as the merits of the field are becoming known, is being rectified, and, with the increased attention being paid to the West Coast, owing to the immense value of Mount Lyell, and the rich developments in the Mount Reid district, much more capital will be available for anything good in future.

The show mine for a long time past at Zeehan has been the Western, on account of the very fine concentrating plant it possesses. A complete Luhrig plant, consisting of stone crushers, rolls, stamps, jiggers, and vanners has been erected at a cost of £20,000. The compact and workmanlike manner in which everything is arranged reflects great credit on the management, and is an object lesson which most mining managers would do well to fix in their minds. Winding plant, mill, blacksmith's shop, stores, offices, &c., are all close together, and well arranged for saving labour and convenience, while a well equipped 2 feet railway connects the mine with the Zeehan-Strahan line, and also runs a considerable distance out for timber purposes. In addition to paying for its machinery, the mine has paid £70,000 in dividends, and the wisdom of starting on a good system with a first-class plant has here been well exemplified.

The return journey to Melbourne was much more comfortable, as we found (in view of the growing trade) that a new steamer, of more than double the tonnage of the *Glenelg*, but only drawing about 9 feet, had been put on, and we appreciated her small but comfortable smoking room and other conveniences very much after the discomforts of the other boats. We reached home after an absence of 12 days, feeling, after our rough but healthful experiences, like new men. The mountain air is so pure and exhilirating, and the change so great, that one has to make the trip to understand how completely it renovates the system, after the somewhat enervating summer of Melbourne. I had a bad cold when leaving, but although wet footed all day during the time I was on the island I returned without a sign of it, and as fit as the proverbial fiddle.

A more healthful resort during the summer months cannot be imagined, while to the mineralogist or botanist a more interesting country does not exist. Some very good fishing is to be obtained on the harbours and rivers, and a little wild-fowl shooting, but, as observed before, bird and animal life is very scarce. Added the lovely scenery, and there is no place in Australia of more interest or better to set up quickly a run down or overworked system.

In concluding this paper I cannot do better than quote Dr. Peters, who says in his report on Mount Lyell :—

"There is a great mineral belt stretching some 20 miles from Mount Lyell in the direction of Mount Reid, all of which country is now inaccessible, but will, without doubt, be rapidly opened up and populated on the completion of the railway. There are also numerous gold mines, and some promising silver districts along the line. The mere outside business in connection with the large population that will always spring up in the vicinity of a great mining enterprise will, in my opinion, very soon pay the working expenses of the road, and give the company its coke and supplies free of freight charges; whilst the outside population should at no distant time provide sufficient business to make the railway a most valuable asset to the company."

With this view I thoroughly coincide, though Dr. Peters should have extended the distance to Waratah (Mount Bischoff), but, of course, from Mount Reid to Zeehan will be served by the line now under construction to connect with the Zeehan-Strahan line; and ultimately by the line which must come within a short time from Zeehan to Waratah. Already population is fast increasing, and, in the near future, I look forward to the extension of the Lyell line further inland towards the district spoken of. That a population of many thousands will in the course of a few short years become settled in these districts is a certainty, and a bright and prosperous future can confidently be looked for. With the advancement of the mines other industries will arise, for I have shown how, with clearing, the land is capable of producing to perfection everything suitable to the climate, and I have no hesitation in saying that greater promise of permanent stability and immense mineral wealth has never been afforded in any other part of the world.

Gold, silver, copper, lead, and tin exist in large and payable quantities, while almost all the known metals have been found throughout the district in more or less quantities. Its possibilities, as the difficulties of transit and prospecting are overcome, are hard to estimate; and, at the risk of being termed an extreme optimist, I have no hesitation in reiterating the belief that it is the richest belt of mineral country in Australasia. To the genuine mining investor, therefore, who looks to the merits of the concern he is going into, and not merely to the sovereigns he can extract from the pockets of a confiding public during the usual periods of inflation or "boom" I repeat the advice given at the commencement of this article, and say, Do not overlook the "Wild West Coast" of Tasmania.

GEOLOGICAL SOCIETY OF SOUTH AFRICA.

AT the monthly meeting of the Geological Society of Johannesburg, Dr. EXTON presiding, Dr. CARRICK read a paper on

"Faulting along the Main Reef"

He said: Since reading my paper on April 13 I have been patiently waiting for criticism, and it was only the other day that I learned from Mr. David Draper, about two hours before his departure for Europe, that there had been no criticism submitted to him as secretary of the society. During these months, therefore, it may be said that I have been practically muzzled, as I could not indulge in any further deductions previous to the criticism on the first part which I invited, but there is absolutely no criticism. The only course which I can now follow is to return thanks to my absent critics, and, at the same time, point out some of the most important practical conclusions which must be arrived at if the theory which I have put forward in my paper be accepted, as it seems to have been, by this society more or less unanimously.

1. If all the dip faults in the mines on the Rand have been originally produced by subsidence, as illustrated in my diagram, then this subsidence took place either after the complete formation of the whole system, or else gradually during the formation of the beds themselves; and I may say that I am quite convinced that the only satisfactory explanation of the phenomena which confront us in the Rand is to be found in a theory of gradual subsidence, beginning with the laying down of the first bed in the entire formation and continuing possibly up to the present date; for if we allow that the subsidence took place after the total number of beds had been laid down, then there must have been a thickness of 4 or 5 miles of beds above the level of the top of Hospital Hill before this grand universal subsidence took place, and in this case we should expect this banket formation to extend in an unbroken sheet at least to Pretoria, towards the north, and in face of the fact of a practically absolute absence of such an occurrence between Orange Grove and Pretoria we must either suppose that it at one time existed, was then washed away, and ultimately replaced by younger formation, or else we must suppose that after the laying down of the first bed in the Witwatersrand series a subsidence began which gradually made room for bed after bed, until the entire formation was completed as we find it to-day. This is, however, a very large subject, which I hope to deal with much more fully in future papers, containing particular and exact data in support of the supposition, and as I wish to cut my remarks this evening as short as possible, owing to the cold from which you can see I am suffering, I would merely indicate at present the nature of the conclusions at which I have arrived as a logical result of my observations on "Faulting along the Main Reef."

2. The second important conclusion at which we must logically arrive at if a gradual subsidence theory be adopted, is that this subsidence must have taken place within certain limits and along certain axes; in other words, the resultant effect of such a subsidence would be the production of a more or less esturian deposit, that is a deposit formed in a shallow basin or channel with a main axis of subsidence, and communicating directly with the sea. In other words, in a shallow tidal lake.

3. If this gradual subsidence theory be adopted as correct we must moreover make up our minds to very considerable unconformability, between the different layers in the formation, for it would be most unreasonable to suppose that a gradual subsidence could take place along a main axis of subsidence extending from Boksburg to Klerkdorp, or regularly and in such a manner that from one end to another of this stretch of country the various beds would be laid down on the top of each other with anything approaching to absolute regularity. I am satisfied, in fact, that the more we investigate the exact relations of these beds to each other, the more shall we come to the conclusion that unconformability is the rule and not the exception in the Witwatersrand banket formation.

Discussion.

Mr. J. D. GREEN said it was from Dr. Carrick that he first got his ideas on the matter. The subject was such a big one that they could not possibly investigate it at one meeting. He felt sure now it had been mooted by Dr. Carrick, they would be able to give it much more attention than they had hitherto done.

The CHAIRMAN remarked that it was a subject that had occupied the attention of all observers in this part of Africa. It occurred to him that at no distant date the whole question of subsidence would have to be taken up. No doubt there was a foundation of truth in what had been advanced by Dr. Carrick, and he hoped they would have the benefit of his extended observations. (Applause.)

The Black Reef.

The following criticisms on Mr. G. D. Stonestreet's paper, "Notes on the Black Reef at Natal Spruit," was then read for Mr. R. Lewis Cousens:—Being closely connected with operations which have been and are being carried out at more than one locality on the Black Reef, the above paper is particularly interesting to myself.

First of all, I wish to state that, not being a professional geologist, I am unable to express an opinion or form a theory as to how or in what manner this reef has been formed, which certainly presents characteristics altogether different to those of any other reefs on the Rand, but with several of the statements and conclusions arrived at by the author of the above paper I entirely disagree. Mr. Stonestreet appears to imply that there is no reef existing between the Black Reef and the Elsburg Series, quoting as confirmation of this the fact that the Orion Company bored to a depth of 2300 feet without meeting any reef. I venture to give as my opinion that faulted reefs would have been met with before the Elsburg Series were encountered at this point, if operations had continued, as in certain places there are other reefs which approach and closely underlie this reef at the outcrop, but which dip at a very much greater angle. The places I allude to are situated at the eastern portion of the East Orion Company's claims, at the Doornkop Gold Mining Company on the southern portion of the Zuurbult and at the New Midas Estate Company's claims. As stated above, these reefs dip at a very much greater angle than that of the Black Reef, and, in fact, appear to be conformable, whilst, as is well known, the Black Reef is unconformable. I entirely demur with Mr. Stonestreet when he says: "What are known locally as shoots seem to be the troughs of the undulations where the reef was deposited, and particularly such portions of it which were accessible to the liquid solutions carrying gold. It is only upon the crests that the reef is entirely absent, and in some places even where the banket was deposited, the gold solution failed to reach it, owing to difference of elevation."

I contend that the above is not necessarily so—in fact, in portions close to the outcrop, where the reef has been tilted up to 45° or even 50° it is frequently richer than it is lower down. A case I have in mind was where ore was taken solely from the crest of a wave (so called), and yielded in one month's crushing with a light 20-head mill, from plates alone, over 800 ounces.

From my experience it appears to me that, unlike the other reefs on the Rand, which are, as a rule, I believe, richer in proximity to dykes, the latter cut off the shoots of gold in this reef. Several examples I can quote from actual experience where drives have cut through a dyke which is only about 18 inches in thickness, where, on the other side, the colour of the rock is greenish, being heavily impregnated with pyrites, and gives fair assay results; whilst on the other scarcely a vestige of pyrites is to be seen with correspondingly poor assay results. This would give one the impression that the reef was laid down, or at least mineralised, at the same time or after the formation of the dyke. Whether this is possible from a geological point of view, I should be glad to learn.

The statement that where the quartzite is thin there is no reef, and *vice versa*, requires correction. The contrary frequently is my experience; in fact, when driving out of a shoot the reef itself changes into quartzite (and, therefore, the latter is thicker at this point) rather suddenly, *i.e.*, within a length of (say) 20 feet, the blanket pebble will get fewer and further between, the rock (if I may so use the expression) will become more glassy and vitreous looking, until the banket entirely disappears, and is replaced by very hard quartzite, the clay leader underneath thinning to the thickness of a knife blade.

I am entirely at variance with Mr. Stonestreet in his final deductions when he states that this reef should not be prospected by means of bore holes. On the other hand, I maintain that bore holes should be sunk until a pay shoot is struck, and that a property should not be heavily equipped with surface machinery and works constructed until this is done.

I would agree with the author of the paper in his contention if it was fairly certain, as he states, that the reef (and I presume he includes a shoot) would be found by driving probably within 300 feet from the bottom of the shaft. I can only state that in certain portions of the Black Reef, a drive might be made for 3 miles before reaching a shoot, a task, I think, that would be appalling to the wealthiest corporations on these fields. The cost of shaft sinking per foot is very heavy as a rule on this reef, owing to the hard nature of the overlying rocks, and also frequently on account of heavy inflows of water, necessitating heavy equipment, which to my mind is money foolishly expended until it is known with comparative certainty that a pay shoot exists below. On the other hand, by means of a diamond drill, it can be ascertained if a pay shoot exists at a moderate cost owing to the general small angle of dip, prior to surface equipment, for even if the assay of the actual core is low, an opinion can be formed by those experienced in the nature of this reef and formation if the drill has struck a shoot, because under these conditions not only is the reef itself good-looking banket and heavily charged with pyrites, but also the quartzite, and even in some cases the limestone above is well charged with pyrites. I may mention that when noticing this latter fact, when boring through limestone in a certain locality on the Black Reef, I had the wash from the drill assayed, which showed gold to the extent of ½ dwt. to the ton. Thus it can be fairly well ascertained when boring if the drill is located on a pay shoot.

Mr. STONESTREET briefly replied.

The CHAIRMAN made some explanatory observations, which he illustrated by rapid statistics on the black board.

The meeting passed a hearty vote of thanks to Dr. Carrick and Mr. Cousens.

The Secretary.

The CHAIRMAN said the energetic secretary (Mr. Draper) had gone to England on important business. He had obtained the confidence of monied men, and his journey to England upon geological matters was the outcome of his work in connection with the society.

New Library.

The CHAIRMAN went on to say that Mr. Draper and Mr. Green had approached the Library Committee with a view to obtaining, if possible, rooms in the new library building—£500 had been promised by four gentlemen; Mr. Sawyer, £200; Mr. David Draper, £100; Mr. Melville, £100; and Mr. J. D. Green, £100. He thought it would be easy to raise £2000, and if they got that they would be in a better position to press their claims upon the Library Committee. He hoped that those who had the money and the generosity would add their names quickly to the list.

The Johannesburg board of directors of the RAND KLIPFONTEIN COMPANY (LIMITED) have resolved to issue the 15,000 reserve shares at the rate of £6 per share, and they now offer these shares to those shareholders registered on the books of the company on August 10, in the proportion of three reserve shares for every 10 shares held at that date.

MEETINGS OF MINING COMPANIES.

HICKS' GOLD MINE, LIMITED.

THE statutory meeting of the shareholders in Hicks' Gold Mine (Limited) was held on Monday, at Winchester House, E.C., the Earl of KILMOREY, K.P. (the Chairman of the company) presiding.

The SECRETARY (Mr. W. E. Pearse) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—As you are aware, this is the statutory meeting of the Hicks' Gold Mine (Limited)—a meeting which we are compelled to hold by law within four months of the registration of the company. At such an early period there is very little for me to say, except to tell you the bare facts, that the property has been transferred and the leases registered in the name of the company in Perth, W.A. Operations which were commenced early in the year have been carried on continuously down to the present time. By the last advice from the managing director in Western Australia, our wages alone amount to over £70 per week. I think this is an excellent opportunity for me to emphasise what has already appeared in the newspapers—namely, that we are in receipt of very favourable reports from our manager at the mine. Mr. F. C. Monger, M.L.A., is our representative on the other side, and holds the power of attorney of the company. At the present moment the directors are making preparations for the full working of the mine, and are now considering tenders for the crushing machinery, and as soon as this question is settled we hope to have good results. We are only awaiting a cablegram from Mr. F. C. Monger before settling this point. In case the reports which appeared in the papers last week escaped your notice, I will read what the mine manager says with regard to the operations:—"During last week I had two men crosscutting on Hawson's boundary, and cut through three distinct reefs, averaging from 1 to 2 feet each. The easterly one is carrying rich gold in the casing, and I stripped it for a length of 20 feet and a depth of 7 feet. I have not pulled down the reef, as I intend opening it up more." This report is dated June 20. Three days later he confirms his previous report, and says:—"Since that date I have opened another remarkably rich reef, rich in fine gold. I have only opened it to a depth of 7 or 8 feet, and stripped it along about 20 feet. Upon some of the stone being pulled down I was astonished at the result, and the dish prospects on either side the stone were exceedingly good, giving at least up to 10 ounces to the ton." We know in gold mining it is not good policy to be too sanguine about the results to be obtained, neither ought we to be unbelieving when we have scientific reports as to what is expected to come. Mr. William Lonsdale, one of your directors, who is present here to-day, has lately been over our property, and carefully inspected it. He is, therefore, acquainted with the operations and appearance of the mine, and if it is your desire, and not trespassing on your time, he will no doubt say a few words. One thing, perhaps, the shareholders may be glad to be assured upon, and that is that the working capital, as set out in the prospectus, has been secured. Mr. Monger is negotiating for the land adjoining our property, which he considers valuable, and which can be obtained on very advantageous terms. I think I need not detain you any longer. I have nothing further to say on this occasion, but if any shareholder wishes to ask any questions I shall be happy to answer them to the best of my ability. (Applause.)

A SHAREHOLDER: Could Mr. Lonsdale give us some idea of what he saw?

Mr. WILLIAM LONSDALE: Gentlemen—I went out to Australia at the early part of this year, and I received a cablegram asking if I could visit the Hicks', personally cable what I thought of it, and also whether I would accept a seat on the board of directors. I think it is very seldom that anyone is given the opportunity of seeing a property before he consents to join the board, and I certainly think that it was a dangerous proposition to make to me, because I should have been obliged to condemn the mine had it not been to my liking. However, I am glad to say that my visit was of a highly encouraging character, and I had every satisfaction in sending the telegram which appeared at the head of our prospectus, as follows:—"Goongarrie, April 2, 1896. Visited Hicks'; several shafts on several reefs showing gold, one extremely rich; water plentiful." I am quite certain that that cable will be borne out. (Applause.) The reefs are very rich in gold, and down to a depth of 30 feet. In the whole of that 30 feet the quartz is full of gold, and I brought specimens back with me—not picked, but certainly not the worst I could find, and there is almost as much gold in them as stone. I have a specimen with me and shall be glad to show it to any shareholder who so desires. For the whole of the 30 feet, as I have said, the reef is exceedingly rich; what it may be below that no one can prophesy, but we have every reason to suppose that gold will come out. Several shafts have been sunk on the property, and considerable gold been opened out, estimated at between 1000 and 2000 tons. I myself have estimated it at the lower quantity, which is not at all difficult, as it is quite easy to pick out the stone with gold in it, out of the heaps at the head of the shafts. Not very far from the mine there is a large lake, so that we shall have no difficulty about water; the only difficulty possible is that we may have too much. At a depth of 70 feet we have met with a plentiful supply, so much so that we have been enabled to supply a neighbouring property, not sufficient for driving a mill, but enough for machinery purposes. However, at a depth of 150 feet we shall have ample water, probably more than we shall require. The Chairman has told you what we are doing as regards the question of machinery on the mine, and I have not the least doubt that when the machinery is erected, we shall have very good results indeed, otherwise I shall be grievously disappointed if it is not so. I may say that nothing would have induced me to join the board if I had disapproved of the mine, but as I have already said, I do not disapprove of it, and I congratulate this company on having a most valuable property. (Applause.)

A SHAREHOLDER: Has the property been transferred to the company?

The CHAIRMAN: Yes.

The meeting then terminated.

MYSORE WEST GOLD MINING COMPANY, LIMITED.

The ordinary general meeting of the shareholders in the Mysore West Gold Company (Limited) was held at Winchester House, E.C., on Monday, Mr. ROBERT WALKER (Chairman of the company) presiding.

The SECRETARY (Mr. George Parker) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—Before making a few remarks on the reports and accounts, I think it is desirable that I should give the reason why the board asked the two companies—the Mysore West and Mysore Wynaad Consolidated—to hold their meetings together. Owing to the increasing number of members who hold shares in both companies, and as regarding the working, both companies are equally interested in the Tank Block, it was thought more convenient for the shareholders to hold the two meetings together. Of course, the resolutions that will be submitted can be voted on separately, but it is a considerable advantage that we shall avoid the monotony of any remarks which are applicable to both companies being repeated. I presume you will allow the report and accounts to be taken as read, and before moving their adoption I should like to make one or two remarks. There is not much to be said apart from the report, which is very full; still I should like to point out one or two things that may be of some interest to you. You will notice that the work done in the previous year was 1364 feet; in the year under review the account shows 1742 feet. The average value of the ore was 15 dwts., but I may remind you that it is not an unusual thing to have the stopes running poor occasionally. I notice that in the Mysore Mine in 1894 the average value was 14 dwts. 12 grains, and in the following year it increased to 19 dwts. 10 grains. I mention this merely to show you how the gold varies in the stopes. I may mention, further, that the last return gives a poorer result in consequence of the rich stope in the east lode, as it is called, not having been operated at all. There is every likelihood, however, of its being in operation in a few weeks, when it will come in to increase the average. Our manager has strict instructions never to confine himself to the rich part of the mine, but to put through the mill the poor ore as well as the rich ore, so as to secure a general average. At the same time, he is instructed to put down the exact quantity of ore that passes through the mill, and not to distinguish the quartz from the country rock; all must go through. I consider this very important, because the manager has it in his power to have considerable effect on this side, by merely taking the rich ore from the stopes. Another thing I should like you to notice. In the report the size of the lode is stated to be very good. I think it averages from 3 to 4 feet, and in some places a good deal more. I consider a wide, though poor, lode much better than a rich narrow lode for the reason that in blasting the quartz a good deal of the country rock adheres to the quartz on both sides, and, as you can easily imagine, the average is reduced by putting the whole through the mill. I do not think I need say anything more with regard to that point. It has been shown that the character of the ore is similar to that in other parts of the Mysore Mines. A good lode has been got at the Prospect shaft, running direct north; it is well known that the lode runs north, and that will be an advantage to us when we get further down with the new shaft. As regards the accounts and the balance-sheet, everything is there set down, and as Messrs. Price, Waterhouse, and Co. have dealt with our accounts, there is nothing I need touch on there. There is one important account here that has not appeared before, and that is the profit and loss account. By it you will find that we have now 20 stamps working. These 20 stamps, however, were not working all through the year; for only four months of the year we had 20 stamps going, and for the other eight months only the old stamps averaging about 13 stamps, or rather, as one old battery was taken down, the average would be a little less, perhaps 12½. If, then, you get from 12½ stamps 6630 ounces of gold, you can easily calculate how much will come to the profit and loss account when 20 stamps are running all the year, and from what is occurring now with the 20 stamps shows, I think, that we are perfectly justified in saying in the report that we are in a dividend-paying position. I do not think there is anything else I need remark upon. I shall be very glad to answer any question that any shareholder may wish to put, either as to the accounts or as to the working of the mine. I now beg to move:—"That the report and balance-sheet of the Mysore West Gold Company (Limited) be hereby approved and adopted."

Mr. TARRY seconded the resolution, and it was carried unanimously.

Mr. BROWNJOHN supposed it was intended now to work the northern part of the property vigorously seeing how well they were doing on the adjoining Coromandel property?

The CHAIRMAN said that was so. They intended to go deeper in that part of the property, but they would be able to get at the lode better from the new shaft that had been started. It had been shown that the lode ran through the whole length of their property, and when it was struck in the new shaft they would have the whole distance between it and the prospect shaft.

Mr. BROWNJOHN: And the whole of that is virgin ground, is it not?

The CHAIRMAN: Exactly; it is practically all virgin ground.

Mr. BROWNJOHN thought that was extremely satisfactory, and spoke well for the prospects of the mine, as that part of the property was between the Coromandel and the Mysore properties.

The CHAIRMAN said of course they all knew that in mining nothing was certain, but everything pointed to their having a valuable lode.

Mr. BROWNJOHN said he should like to make a proposition. He thought it would be a very gracious act on the part of the shareholders if they made some remuneration to their Chairman for all the trouble he had taken on their behalf, and for the prosperous condition to which he had brought the company. Before Mr. Walker went to India in 1889, the affairs of the company were at a very low ebb, while now they appeared to be on the verge of great prosperity. There was at the present moment an amount in hand that would enable a small dividend to be paid. This was due largely to Mr. Walker's labours, and he begged to propose that they should vote Mr. Walker an honorarium for all the trouble to which he had put himself on behalf of the shareholders. Mr. Walker had been in every way most obliging; he had done his work exceedingly well, and he thought they should vote him something substantial. He believed Mr. Walker's visit to India had proved very injurious to his health, and that he had ever since suffered from its effects.

Mr. H. G. JONES said they all felt that Mr. Walker had done a great deal for the company, but he thought they ought to wait before voting him an honorarium, until the company was actually in a dividend-paying position. Besides, was there not some provision in the Articles of Association by which the directors got a certain percentage of the profit? When they came to the dividend-paying stage—and it seemed likely that that would be within the next 12 months—they would better be able to act on Mr. Brownjohn's suggestion.

The CHAIRMAN said he might just say that at his great age—he was 78—it was a question whether they would see him at the end of another year. The only claim that he thought he had on the company was as to his services in connection with the acquisition of the Tank Block. That was a matter of great difficulty, in which he thought he had rendered some service. However, if it was the desire of the shareholders that the matter should be left for another year, if he was not there himself, it might perhaps come to his successors.

Mr. BROWNJOHN moved the re-election of Mr. Walker as a director of the company.

The resolution was seconded, and carried *nem. con.*

On the motion of the CHAIRMAN, the appointment of Mr. J. M. Pritchard as a director, in place of Mr. Shaw Kennedy, resigned, was confirmed, the Chairman remarking that he had found Mr. Pritchard most attentive to his duties, and a very desirable colleague.

The auditors, Messrs. Price, Waterhouse, and Co., were then re-appointed.

MYSORE WYNAAD CONSOLIDATED GOLD MINING COMPANY, LIMITED.

The ordinary general meeting of the shareholders in the Mysore Wynaad Consolidated Gold Mining Company (Limited) was subsequently held, Mr. WALKER presiding.

The CHAIRMAN formally moved the adoption of the report and accounts.

Mr. TARRY seconded the motion, and it was agreed to.

Mr. Walker was re-elected a director, and the election of Mr. J. M. Pritchard was again confirmed.

The auditors—Messrs. Price, Waterhouse, and Co.—were re-appointed, and a vote of thanks to the Chairman and directors concluded the meeting.

DISCOVERY OF ASBESTOS IN THE KALGOORLIE DISTRICT.—A new addition has been made to the mineral wealth of the Kalgoorlie district by the discovery by Messrs. Crawford, Paton, and Greer of asbestos of payable quantity. The find was made near Hannan's Lake, and the fortunate discoverers have secured 120 acres. The Hon. P. Perkins, of Queensland, who is now on a visit to Kalgoorlie to report on the find, is very much pleased with the discovery, and is of opinion that the asbestos discovered is of the best quality, being soft, and of a silky texture. So far little work has been done, and the samples shown were taken from a depth of 3 feet. The vein here is 15 inches thick, and outcrops for some distance. Mr. Perkins considers the find highly payable.

WAIHI GLADSTONE GOLD MINING COMPANY, LIMITED.

The statutory meeting of the shareholders was held on Monday, at 8, Old Jewry, E.C., Mr. R. D. WILKINSON (the Chairman of the company) presiding.

The SECRETARY (Mr. L. Malleson) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—The present meeting has been called in conformity with an Act of Parliament rendering it necessary to hold a meeting within four months of the registration of the company. The company was registered on April 24, and we could, therefore, have waited a short time longer before holding this meeting; but, the holiday season being upon us, it was thought more to the convenience of shareholders not to delay it, more particularly as the property being on the other side of the world, it was not probable that we should have any further news to place before you than is in our possession to-day. We have, however, some interesting information to give you. We are doing what we can to forward the interests of the company. Mr. H. Gilfillan, of Auckland, has been appointed local secretary and agent, and under power-of-attorney sent to him has taken charge of the property on behalf of the company. We have also appointed a superintendent of the mine, and I may say that, in my opinion, the company has been exceptionally fortunate in this matter. Mr. James Langford, who arrived some time ago in London in connection with other business, was introduced to the board by Mr. Parker. We had the advantage of several personal interviews with him, and his testimonials, of which I hold copies in my hand, speak very highly both of his capacity as a mining engineer, and of his general trustworthiness. The board has, therefore, concluded an agreement with him to take charge of all mining matters in connection with the property, on terms which make Mr. Langford's remuneration largely dependent upon his success at the mine. [The CHAIRMAN then read two or three of the testimonials.] Mr. Langford sailed for New Zealand a short time since, and during his stay in England has been making himself acquainted with the most recent improvements in crushing machinery and the most modern methods of extraction. It is a very satisfactory circumstance that the original vendor is highly respected in New Zealand, and is a personal friend of one of the directors. His London agent received a letter from him, dated June 13, of which the following is an extract:—"I am pleased to learn that the Waihi Union Company has recently cut the Amaranthe reef in its low level; it is worth £8 per ton, and, according to recent surveys, making straight for the Gladstone ground. The general impression is that the Gladstone will prove to be one of the best properties on the field, and hundreds of acres have lately been taken up outside of our boundary." The following cablegram was received from Mr. Gilfillan last week:—"Vendors have transferred; all the deeds are in my hands; remit by telegraph £250 stamp duty upon registration, general expenses; the company is registered." The property has, therefore, been transferred to the company, and the necessary work in order to comply with the mining laws of New Zealand is being carried on; Mr. Langford is on his way to the mine, and I have no doubt that in due time we shall receive full reports from him. I shall be very pleased, gentlemen, to answer any questions you may like to address to the chair.

Mr. SNOW asked if any gold had been found on the property.

A SHAREHOLDER enquired if reports on the property would be communicated to the shareholders.

Mr. HALL asked what amount of capital had been subscribed.

The CHAIRMAN, in reply, said that no more than the absolutely necessary work had been done on the property, and that, according to the reports received, the course of several reefs had been marked out. The shareholders would always receive any information sent from the mine. The 20,000 shares offered for subscription had been applied for and allotted, which, the board were advised, would provide sufficient capital for the requirements of the company.

A vote of thanks to the Chairman terminated the proceedings.

SOUTH CONDURROW.

The 16-weekly meeting was held on the mine, on Wednesday, Mr. H. J. MARSHALL presiding.

The accounts showed:—Debts—Labour costs, £1394; merchants' bills, £473; interest on bank overdraft, £29; lords' dues, £71; total, £1969. Credits—47 tons 3 cwts. of tin sold realised £1847; extra carriage, 19s.; discounts on merchants' bills, £11. The credits totalled £1969, leaving a loss of £109 on the 16 weeks. Balance against the adventurers, £383.

Captain RICH, the manager, said they were working on a limited scale in the eastern part, and, unfortunately, they had got to the end of their boundary. Nearly all their operations were confined to stoping in the backs of the 40 and 60. They had backs 50 or 60 fathoms high, but as to whether they might go up 20 or 30 fathoms higher, or not more than 6 feet, he could not say. It was a question of paying or nearly stopping. The price of tin was against them, but they were doing all they could to avoid incurring any great expense. Personally, he should like to see certain developments carried out in the western ground, because if they did not search, they would not find. When things were brighter, they might, by Limited Liability, or otherwise, raise capital to work the western part. He fully intended, having now passed threescore and eleven years—the greater part spent in mining—to have retired from the managership, as he felt it rather too much to go underground; but the Chairman had pressed him to go on, at all events for the present, and he had decided to do so. (Hear, hear.)

The CHAIRMAN reminded the shareholders that at their last meeting, in August, 1895, they were advised by their agent that, with the then existing price of tin, there was no prospect of making profits at the ground they had laid open in the western part of the sett; and they decided to cease working there, and to do what they could in the eastern part, and keep the mine alive, so long as no loss was incurred by so doing. They then made a call of 1s. a share, calculating that, allowing for the profits which they expected to make, they would clear their books. They were defeated in that by having to pay more law costs than they expected and by the price of tin remaining as it was. The price still remained about the same, and they saw no justification for departing from the course they resolved to adopt last August. They had a very satisfactory share list, still having 5758 shares on their register, and the arrears of calls due on those shares amounted to only £3 9s. (Hear, hear.) Arrears of calls due on forfeited shares were £63, and on relinquished shares 7s. He was sure they would all rejoice with him that Captain Rich had consented to stay on, at all events for the present; and he hoped they would be able to make such arrangements as would relieve him of the hardest part of his duties, instead of parting from him, after having worked with him so long. South Condurrow would no longer be like South Condurrow when Captain Rich ceased to be in charge of it. Referring to the loss, Mr. Marshall said they felt they were under a certain obligation not to ask their shareholders to make calls, but they did not think it desirable to increase their adverse balance, and he proposed that they make a call of 6d. per share, which would rather more than cover their loss on the 16 weeks.

Captain RICH seconded the motion, and it was carried unanimously.

On the motion of Mr. JAS. WICKETT, seconded by Mr. BARTON, the committee were thanked, and re-elected.

Votes of thanks were accorded the Chairman and agents of the mine.

The sales of coal for the month of June in the NEBBUDDA COAL AND IRON COMPANY (LIMITED) were 762 tons.

The offices of the QUEENSLAND INVESTMENT AND LAND MORTGAGE COMPANY (LIMITED) have been removed to 57, Gracechurch-street, E.C.

ASSOCIATED GOLD MINES OF WESTERN AUSTRALIA, LIMITED.

The second ordinary general meeting of the shareholders in the Associated Gold Mines of Western Australia (Limited) was held on Monday, at Winchester House, E.C., Mr. JAMES JUDD (the Chairman) presiding.

The SECRETARY (Mr. E. F. Tremayne) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—I assume that the report and balance-sheet which are presented to you will be accepted without the formality of being read. They contain certain facts and figures which are essential and interesting, and, no doubt, will call for some questions on your part; but, in all probability, you will be more concerned to hear a statement of the past history of our company, and of the policy which has dictated the action of your directors, as well as the policy which it is proposed to pursue, than to listen to a running commentary upon a report now in your hands. It is an interesting fact that our critics in the early history of the company complained that the views we took of our future were far too roseate, and thought that we expected greater things than it was at all likely would follow. One paper in particular—a paper which I have too much respect for to name—complained that not only was the directorate lacking in strength, but that the Chairman especially had excited hopes which it was impossible could be realised. At that time your shares stood at a little above par; to-day the £375,000 of which the capital of your company consists, with the bonus shares distributed, is valued in the market at something like two millions of money—or more than five times that which excited the objections of our critic some 12 months ago. We have distributed within less than 18 months by way of bonus one share each in the Lake View South and Lake View Extended for every five shares originally held in the Associated—which bonus shares to-day are worth more than £300,000—constituting a return of nearly the entire value of the original capital of the company. In directing your attention to the map which we have before us, you will see where our mines lie in the great Hannan's field—a district which, there can be no question, is the richest in all Western Australia. Here is the Lake View Extended, the latest of our flotations; there Lake View South, the first; here the Adelaide, and there the Australias. In reference to Lake View South, you scarcely need to be reminded that it was disposed of to a separate company for the sum of £150,000, £75,000 of which has been distributed in shares among the shareholders of the Associated, and it is interesting to note that this capital of £150,000 is valued in the market to-day at nearly £500,000, whilst the latest of our flotations is steadily advancing with every probability of reaching a similar value. You are aware that in our two subsidiary companies we first arranged for ample capital for the efficient working of the mines, and the distribution, as already stated, of 150,000 shares, part of the purchase money, among the shareholders of the Associated, we have retained something more than the original cost of the mines disposed of. So that after the practical return of our original capital, that capital remains intact. We shall have to consider by-and-bye whether we may not make further extensions in this valuable field—(applause)—not only with the moneys now in our possession, but with the results of future flotations. It is clear that this must be done unless you submit to a reduction of capital and a return of the moneys representing the cost of the properties sold. The Adelaide will be the next of the subsidiary companies to be floated, and the accounts we have received from Mr. Gray justify us in saying that this mine, too, will certainly equal those that have already been so successfully placed upon the market. We have recently received copies of a speech addressed by Mr. George Gray at the Adelaide Town Hall, on Tuesday, June 23 last, to one of the most enthusiastic gatherings ever held in connection with the mines of Western Australia. I have no intention to quote largely from this speech, because your directors have determined to circulate it *in extenso* among the shareholders—(hear, hear)—but with reference to our two early flotations, and to the Adelaide, which will shortly be placed upon the market, it may be as well to quote one or two paragraphs which justify the opinions held by us. Speaking of the Lake View South, Mr. Gray says:—"Three shafts have been sunk upon this block, the main 200 feet in depth, the other shaft 100 feet deep. At the 100 feet level the three shafts are connected by a drive along the reef, which is thereby proved of an average width of 9 feet. This drive is about 550 feet long, and carries good ore the entire length. There is a supply of water in the main shaft, equal to 5000 gallons per 24 hours, the last 15 feet of the shaft being a well of water." As regards the Lake View Extended, Mr. Gray continues: "Five shafts have been sunk on the Lake View Extended with the object of finding the several lodes which are believed to traverse the block. A shaft has been put down near the western boundary, but at 60 feet sinking was suspended and a crosscut made, which is now 150 feet in length, reaching to the western boundary line. The third shaft has been sunk to a depth of 100 feet, and at that level a crosscut has been driven 75 feet to communicate with the crosscut from the second shaft. It struck a well-mineralised formation, carrying gold, and also provides good ventilation for the workings. A crosscut has also been carried 115 feet in the opposite direction to connect with a level put in from another shaft, which has been sunk to a depth of 100 feet." And then, speaking of the Adelaide, Mr. Gray's views are most encouraging:—"Four shafts," he says, "have been sunk, the first on the west of the block to a depth of 125 feet. From the 75 feet level a crosscut has been put in towards the hill, and a second crosscut is now being made from the bottom of the shaft, driving west towards the lode formation. The second shaft is down 80 feet, and a crosscut to the east has been driven along at the 70 feet level. The third shaft has been sunk on the southern portion of the block, and has reached a depth of 50 feet, whence a crosscut east 90 feet and west 110 feet have been made. The formation cut in the eastern crosscut is about 10 feet wide, and carries good gold everywhere. The fourth shaft is situated in the eastern portion of the lease, and has reached a depth of 140 feet, the last 5 feet being through water, which we have to bale out. We have driven from the shaft, and at 30 feet east are in the heart of a beautiful blue formation, which I have no doubt is the Lake View lode." I may say, from information we have received, this is rendered an absolute necessity. So much, gentlemen, for the Adelaide and the two mines already floated, and so far I am sure you will agree with me that these facts and figures—admitting, as they do, of no question—are eminently satisfactory and encouraging. We shall continue the same course of action; as our mines are developed and their value ascertained we shall offer them to the public and give them the advantage which follows from separate management, a large and independent working capital and a widened circle of members. The Medindie Hill, the Iron Monarch, and the Iron Duke, which, you will observe, are situated a little to the north of the other blocks, are believed to be among the most valuable of the company's mines, and the accounts we have received of present developments lead us to anticipate in the future most splendid results. The mines to which I have hitherto made no special references are the three Australias—namely, the Australia, the Australia East, and the Australia North, which it is the present intention of your directors to permanently retain under their own management, and work in the interests of the Associated Company. (Applause.) Here, gentlemen, is where they lie, in the very centre of the richest mines of the great Hannan's district. Upon these mines we are erecting complete and costly machinery of the latest and most improved construction, both for wet and dry processes. Mr. Gray, before leaving London, selected this machinery with Messrs. John Taylor and Sons, the eminent engineers, and inspected that portion then complete. It has reached Australia, I am glad to say, and will shortly be upon the mine, and we trust by October in full working order. That is the result of a vast deal of experience and infinite trouble on the part of Mr. Gray and your officers in selecting the very best and most suitable machinery for the purpose, and this will shortly be in Australia and on the mine, no doubt, in October. In reference to these mines, we have received the following encouraging cable from Mr. Gray, dated July 30, which more than justifies the above views expressed:—"Work during the present month yielded considerable improvement in values. Australia group continues develop splendidly. Australia bottom workings are looking exceedingly well. Bulk samples about 5 ounces of gold per ton of 2240 lbs. Permanent working shaft now being sunk. Face of the five reefs proved in Australia will be cross-cut, reduction works being erected near the top. On the eastern boundary Australia East recently discovered lode in North Boulder, been picked up, underlies westerly, there is every indication that traverses Australia East reef. In No. 2 shaft the grade of the ore has risen, gold being generally diffused over face, average assay of ore is 2 ounces of gold per ton of 2240 lbs. Work other leases quite satisfactory. Adelaide at a depth of 176 feet crosscut making good progress for Lake View and Boulder East (Lake View Consols) lode. Lake View Extended at a depth of 100 feet, reef 20 feet wide. Shows great improvement. Lake View South stripping down from both sides of lode. Gold visible throughout the stone." That is the last but one of the wires we have received from Mr. Gray. This, with the latest wire from Mr. Gray, dated July 31, will render any quotation from his speech unnecessary, though we commend to you the careful consideration of every word he addressed to the Australian shareholders:—"Australian bulk samples from dump assayed 13 ounces of gold per ton of 2240 lbs." (Applause.) This satisfies your directors that in the three Australias alone we possess mines far exceeding in value the original capital of the company. You need not be reminded, by the way, that in Mr. George Gray we have a most careful, if not pessimistic, representative of your interests. Therefore, to anything he says you may give full weight, and everything he does say may mean very much more than he has given you in the wire. And now, gentlemen, in reference to our future. We are unquestionally privileged to have at the head of our affairs in Australia the most competent of mining engineers, careful, experienced, and cautious to a fault—if caution can ever be a fault—our consulting engineer and general manager, Mr. George Gray. He also occupies a similar position in connection with the Associated Southern Mines, in the flotation of which company we had a substantial interest, with large pecuniary profits resulting therefrom to our company—and a like position in regard to Hannan's Proprietary Company; and practically he has potential influence in the whole of the Hannan's field. He is assisted by Captain Oats and others who have made their name in the great gold fields of Western Australia. We have, too, the untold advantage of the directorial superintendence in Australia of Mr. George Brookman, the brother of our London director, Mr. W. G. Brookman, to whom Western Australia and ourselves owe so much. We also have, as one of the London board, Mr. Doolette, one of the earliest pioneers, with the Brothers Brookman, of Western Australia. (Applause.) I am going to ask your kindly attention, not so much as members of the Associated, but as men engaged in a most important industry with all that entails upon us. Now, gentlemen, having the men so eminently fitted for the work, we hope that we may prove the originators and leaders in a confederacy amongst the mines of the Hannan's field, which, while leaving perfect independence to each set of proprietors, shall, by means of combined action, allow of the economical distribution of forces, and the most efficient production of the untold wealth of the district. The great water question is one of those which calls for united action, though we, as you know, have largely solved the problem. There are enormous, although at present largely undeveloped, water resources, which need conservation and storage; there is diffused, unnecessary, and unproductive labour that can be reduced and concentrated; there is a want of workshops and stores that can only be supplied by co-operation—a lack of machinery in some parts of the field that can be more than supplied by surplus machinery elsewhere; and, above all, there can be no wiser union than upon the great labour question—united action for the benefit of the miners to whose labours we owe so much—sanitary improvements for their benefit, hospitals for the sick, and sanatoriums for the weak, all in connection with and for the benefit of the many miners that we look to become members of this desirable commonwealth. In Mr. George Gray we have a man to whom this will be a work of love, and who, backed by the directorates at home, will realise what to some may seem but a visionary Utopia. The pursuit of gold is said to have a hardening effect upon man, to blunt his finer susceptibilities, and to beget a spirit of selfishness and greed. Supported by you, this shall not be the case with the great Associated group; the claims of humanity shall be considered, and civilisation with all its ameliorative influences, shall follow upon our advent in Western Australia. (Applause). I must not weary you with further talk. We occupy a unique position in the gold fields of Western Australia; we recognise the claims which that position entails, and we confidently look forward to maintain the supremacy we have secured. In the words of Mr. George Gray, "We do not think many of us will be connected with mining when the Associated Mines cease producing," and, that being so, we shall proceed upon the lines marked out as the result of the knowledge of others and our own experience; we shall do our duty as the employers of labour and the distributors of wealth beyond the dreams of avarice. We shall give you the earliest information of all that relates to your mines, and should any important question of policy arise, you will be consulted, and your views obtained. And now, gentlemen, awaiting any questions you may have to put, which shall receive our careful attention, I shall move the adoption of the report and balance-sheet, and in doing so will simply call your special attention to the fact that the accounts are made up only to December last. They do not include the large profits resulting from the flotation of the Lake View South and Lake View Extended Companies, and which, in addition to having, as I have already explained, given you practically a dividend of 100 per cent., has left us with nearly £100,000 in hand beyond the amount standing to the credit on the balance-sheet before you. (Applause.)

Mr. R. B. TETLEY seconded the motion, which was carried unanimously.

Mr. MOIR, who addressed the meeting at the request of the Chairman, said: Mr. Judd has been kind enough to ask me to come to this table, but I should explain that I am not a director of the Associated Gold Mines—I wish I were. I am here as a shareholder. My companies and myself hold 7000 shares in the Associated Gold Mines, and I only wish that when Gray cabled to us, when he first went out to Australia, from the Hannan's Proprietary camp, that we had bought 40,000 shares instead of 7000. Gentlemen, I have just left Gray and Oats (in fact, the Associated camp is just across the road from the Hannan's Proprietary camp), and I am sure you shareholders and the directors of this company will be glad to hear that you have got two of the best men in West Australia to look after your properties. (Cheers.) As a mining man, in my opinion, there is nobody to equal them in West Australia to-day. Captain Oates is the most careful of men—a man nearly 70 years of age, I suppose. He was a Cornish miner for about 30 years in this country, and he knows perfectly well what he is talking about. Now, one of the shareholders asked a question about the Lake View lode. Gray and I went to the bottom of the Lake View Mine, and a more astounding mine does not exist to-day than the Lake View. At the 100 feet level the lode in some places went as far as 40 feet wide, and carried gold from wall to wall. I do not suppose there is another mine like it to-day in existence. At the 200 feet level the lode in some places was 20 feet wide, and the manager told us that the Lake View lode is making very strong towards the south. Now, that is rather significant for your companies, because you own properties right to the south. It is true that the lode is very strong to the north, but towards the south it is a very strong lode indeed. (Hear, hear.) Speaking as a shareholder, I was very glad to hear Mr. Judd say that you are going to hold on to your Australian properties, because they are exceedingly valuable; there is no doubt about that. I saw the samples which came up from the Australian properties—that is, Block 28 E. There is not doubt—Gray told me so, and so did Oates—that you have got in Australia a bonanza. (Cheers.) As far as we are concerned, we are not going to sell our shares, because I believe that the shareholders here will see within the next six or seven months that Associated Gold Mines will go to 4½, and that is where they ought to be. (Cheers.) If I may be allowed to say so, it is rather difficult at the present time to say exactly where this Lake View lode is going to strike the south, because there are two other properties between you and the big Lake View lode; but there is no doubt that one of your properties is going to get to the Lake View lode, if it does not exactly strike the boundary. Gentlemen, I think I have nothing further to say, except that I am very much obliged to the Chairman for being kind enough to ask me to say these few words. I have just come from Hannan's Field, and I thought you would like to have the latest news. I have only given you facts as they may be proved by going on the place itself.

The meeting concluded with a vote of thanks to the Chairman.

MARIE ROSE GOLD MINING COMPANY (LIMITED).

An extraordinary general meeting of shareholders in the Marie Rose Gold Mining Company (Limited) was held on Wednesday, at the Great Eastern Hotel, Liverpool-street, E.C., for the purpose of receiving a report from the directors as to the company's position.—Lord Mountmorres, who presided, said that the directors had no desire to disguise from the shareholders the fact that they now met under very different conditions from those which had obtained at the last meeting, when there had seemed every prospect of their becoming one of the great Rand mining companies. He himself was away in Australia when he received information by cable to the effect that difficulties had arisen with regard to the promotion of the company, and since his return the directors had found themselves in a sea of litigation. While the directors had no fears as to the results of the litigation, even if it were pressed up to the hilt, the prospects of the company were considerably damaged, both because of the heavy cost which would be entailed, and also because the hands of the directors were necessarily tied. With regard to the property itself, he felt sure that it was a very good one, and while they had not thought it advisable during the litigation to do much in the way of opening it up, they had still tried to develop it in a systematic, careful, and economical manner. In view of the value of the property, he confidently appealed to the shareholders to unite among themselves to stop the litigation which would turn out disastrously for the company.—Dr. Ledlie moved: "That the shareholders present at this meeting hereby approve of the past action of the directors, and assure them of their full confidence and support, and further request them to continue to use their best efforts to secure an amicable arrangement with the present litigants, to proceed fully to develop the mine, and to report to a future meeting."—Mr. Tottenham seconded the motion, which was eventually carried unanimously.

CASSIDY HILL (COOLGARDIE) GOLD MINES (LIMITED).

The ordinary general meeting of the shareholders in the Cassidy Hill (Coolgardie) Gold Mines (Limited) took place yesterday, at the Cannon-street Hotel, when the Chairman (Mr. Douglas Onslow), in moving the adoption of the statement of accounts, said owing to the delay in the transport of the hoisting machinery to the mine, and the hard nature of the ground met with, the development of the property had proceeded slowly. Notwithstanding this, however, it was the manager's—as well as the directors'—opinion that when they got down deeper, judging from the experience of neighbouring mines—more satisfactory results would be obtained. In disposing of the Hannan's Paringa lease for £5000 in cash and 25,000 fully paid up shares of £1 each, the board considered that they had made a very good bargain, more especially so in view of the fact that at the time the company was in very low water. No crushing machinery had yet been ordered, and at present their plant consisted merely of a hoisting machine, by the aid of which they would be able to sink down to a depth of 500 feet, and so thoroughly test and prove the mine.—Mr. Lambert seconded the motion.—A very long discussion ensued, during which the policy of the board in selling the Paringa property was questioned, and eventually the meeting was adjourned for three months, to give the directors an opportunity of further explaining the matter.—A vote of thanks to the Chairman concluded the meeting.

BAYLEY'S WEST GOLD MINING COMPANY (LIMITED).

An extraordinary general meeting of the shareholders in Bayley's West Gold Mining Company (Limited) was held on Wednesday, at the Guildhall Tavern, E.C., Mr. E. D. Oppert presiding.—Mr. Arthur Tooth moved a series of resolutions providing for legal proceedings to be taken against the West Australian Gold Concessions (Limited), the vendors of the property, for the purpose of getting the contract for the sale rescinded, and the appointment of a committee to carry out the suggestion. He stated that the facts relating to the sale of the property had been laid before counsel, with the result that the opinion was given that a binding contract had never been entered into between the two companies concerned. Under these circumstances they were advised that they had a right to have their money returned.—The Rev. Mr. Sam seconded the resolution.—The Chairman, in replying to Mr. Tooth, said he, as the promoter of the company, had been quite as disappointed as the shareholders at the results which had so far been obtained from the working of the property.—A long discussion ensued, and eventually the resolutions were put and lost.—A poll was demanded, and this also resulted in a large majority against the resolutions, which were, therefore, lost.—A vote of thanks to the Chairman concluded the meeting.

GOLD MINING IN SOUTH AUSTRALIA.—During the past few weeks the attention of several of the leading Western Australian mining men who are visiting the colony has been directed to the Barossa mines. Mr. L. R. Menzies, the discoverer of the Menzies gold field, who has had large gold mining experience all over Australia, was the first to visit the field. He made a thorough examination of the leading property there, and was astonished to find a mine with such wonderful prospects remaining unworked. Mr. Menzies has since paid three more visits to Barossa, and has broken out samples from different parts of the mine. He is exceedingly pleased at the result of the assays. On the last visit he was accompanied by Captain William Oats, the well-known Western Australian mining manager, and the latter gentleman expressed surprise that such a valuable mine was not being developed. Captain Oats broke samples from several different places, and these have been assayed by Mr. J. C. Fraser with splendid results. Several other Western Australian mining men have visited the mine, and all agree with Messrs. Menzies and Oats that South Australians must be asleep to allow such a mine to remain undeveloped. Mr. L. R. Menzies is so highly pleased that he has decided not to return to the West with Captain Oats, but he will remain in Adelaide to devote his attention to mining in this colony. A syndicate is being formed, which will include as provisional directors Sir George Shenton, Mr. A. Matheson, of Hampton Plains Company, of Perth, and Mr. H. J. Saunders, Mayor of Perth, besides well-known Adelaide men. It is the intention of the Syndicate to provide a capital of £5000 or £6000 to work the mine lately known as the Phœnix Royal, and which has been rechristened the Menzies Barossa. The formation of this Syndicate has been placed in the hands of Mr. W. A. Kingsborough. It is gratifying to notice that the Western Australian men are pleased with the prospects of the district, and are willing to subscribe capital to work the mines. Several parties have been inspecting the field, and there is every prospect now that mining in South Australia will have a fair show.

EMPRESS OF COOLGARDIE GOLD MINE (1896) (LIMITED)

The statutory meeting of the shareholders in the Empress of Coolgardie Gold Mine (1896) (Limited) was held at the Cannon-street Hotel, on Wednesday, under the presidency of Mr. David Shaw.—The Chairman stated that that was a reconstructed company. Under the scheme the capital was the same as in the old

company—£90,000, in £1 shares—and it was satisfactory to know that all but 453 shares had been taken up. With regard to the United Mines Ore Reduction Company, in which they had acquired an interest, the venture was proving a great success. A large supply of water, the deficiency of which was the cause of the reconstruction of that company, had been secured, and although at present the cost per ton was 36s, it was expected that this would be reduced to a very appreciable extent. The development of the company's mine had been vigorously proceeded with, and the manager had cabled that he proposed shortly to crush ore obtained from the 100 feet level with their own battery. In conclusion, the Chairman said the only business before the meeting was the election of directors, it having been provided in the Articles of Association that "the whole of the board should retire at the statutory meeting." He, therefore, moved the re-election of Sir Alexander Armstrong, Mr. James Henry, and himself.—Mr. Henry seconded.—After a long and rather animated discussion, the resolution was lost, and it was then ruled by the Chairman, acting on the advice of the solicitor (Mr. Dutton), that the meeting stood adjourned for a week, when the question of the election of directors will be again considered.

NEW ZEALAND TALISMAN GOLD MINING COMPANY (LIMITED).

The statutory meeting of the shareholders in the New Zealand Talisman Gold Mining Company (Limited) was held on Thursday, at Winchester House, E.C., when Lord Ernest Hamilton, who presided, said they had not very much information to impart to the proprietors because they had not yet received a full report from their manager. The property had, however, been extremely well reported on, and all that was required to make it a success was the necessary capital to increase the milling power and battery accommodation. These matters were now being attended to, and the 10-stamp battery was being increased by another 10 heads of stamps, while one of Krupp-Grusonwerk's ball mills was to be sent out. It was expected that the results that would be obtained from the increased power would be very satisfactory. They had that day received their first letter from the manager, who spoke very highly as to the prospects of the property. Two gratuitous reports which had appeared in the public Press also spoke in the highest terms of the venture. Before they took over the mine the value of the ore was given at £10, but what their manager had got out was worth from £5 to £8 a ton. They had an unlimited water supply, and having recently extended the battery site they had every facility for easy working.—Replying to Mr. W. C. Johnson, the Chairman said he could not say when the 20 heads of stamps would be at work. The results of the crushings with the 10 head of stamps had quite fulfilled the expectations of the company.—The meeting then concluded.

NEW ALBURNIA GOLD MINING COMPANY (LIMITED).

The first ordinary general meeting of the shareholders in the New Alburnia Gold Mining Company (Limited) was held at Winchester House, E.C., on Wednesday, when the Chairman (Mr. Joseph Brainsford) said the transfer of the property had been completed, and they were now in possession of the mine. They had every reason to believe the property was a good one, and that the working of it would result in a satisfactory return on the capital invested. A cablegram received from the local board in New Zealand, dated June 17, stated that the main shaft had been sunk to a depth of 370 feet, and that the next step would be to open up a large body of good ore. Crushing would be commenced shortly. The prospects were decidedly encouraging. The board had been fortunate enough to secure the services of Mr. Robert James, an eminent mining engineer of Coolgardie, as manager, and he would proceed to New Zealand at once. From the representations they had received as to the value of the property, and with the ample working capital which had been subscribed, the directors hoped to be able to render a good account of themselves in the near future.—The meeting then terminated.

AUSTRALIAN MINES AGENCY (LIMITED).

A special meeting of the English shareholders in the Australian Mines Agency (Limited) took place at Winchester House, E.C., on Tuesday, for the purpose of considering the advisability of recommending the Australian board to register the company under the English Companies Acts, and to appoint an English Board.—Dr. A. Lennard, who presided, explained the many advantages to be derived from the converting of the company into an English one. They had a splendid property, and all that was required to ensure success was a thoroughly efficient board in England. With reference to the 30 per cent. dividend declared at the beginning of the year, as soon as the new board was constituted £60,000 worth of shares would be placed at their disposal for paying this amount. He proposed, "That this meeting recommends the Australian board to register, under the English Companies Acts, a company to take over the undertaking and business of the company."—Mr. H. Snow seconded the resolution, which, after some discussion, was carried.—The following gentlemen were elected as members of the board:—Dr. Lennard, Mr. H. Snow, Mr. W. Smith, and Mr. King.—A vote of thanks to the Chairman concluded the meeting.]

WHITEHEAD AND SULTAN GOLD MINES (LIMITED).

An extraordinary general meeting of the shareholders in the Whitehead and Sultan Gold Mines (Limited) was held on Monday, at the Cannon-street Hotel, Mr. Robert Smith presiding.—The Chairman stated that the meeting had been called in consequence of the unsatisfactory results which had attended the development of the property. Under these circumstances the directors deemed it advisable to obtain the advice of one of the best mining engineers on the field, and accordingly Mr. Edward Hooper, of the firm of Messrs. Bewick, Moreing, and Co., was sent to inspect the property. This gentleman, in his report, recommended that in view of the fact that there was not the slightest indication of any permanent reef either on the Mount Whitehead, north and south, or the south, north, and south leases, that the work on them be discontinued. In regard to the Sultan Mine he thought it would be advisable to stope the ore in sight, and test it before abandoning the mine, while the reefs on the Mount Whitehead should also be thoroughly tested. The Gresham Syndicate, the vendors of the property, on being made aware of the state of things, and getting the report confirmed, had arranged to surrender 45,000 of the company's shares which they held. The board now proposed to further develop the Mount Whitehead property, and in the meantime to secure some other property, by which means they hoped to make the venture a success.—Some discussion followed, in which the policy of the board was approved of, and the meeting concluded with a vote of thanks to the Chairman.

The Ouro Preto Gold Mines of Brazil Company has sold the June gold for £5643 6s.

DIARY.

Monday, August 17.

Anglo-French Exploration, Winchester House, 2.30.
Poorman Gold Mines, Winchester House, 3.

Tuesday, August 18.

Brookman Brothers' Boulder Gold Mining Co., Win. House, 12.

Wednesday, August 19.

Kurani Caledonian Gold Mining Company, Win. House, 12.
New Gordon Diamond Company, Win. House, 12.
Empress of Coolgardie Gold Mines, Cannon-street Hotel, 2.

Thursday, August 20.

Wheal Grenville, 7, Union-court, Old Broad-street, E.C., 11.

Friday, August 21.

Otto's Kopje Diamond Mines, Cannon-street Hotel, 12.
Sutherland Reef (Limited), Winchester House, 12.
Gold Reefs of Western Australia, Cannon-street Hotel, 2.

A WEST AUSTRALIAN DINNER.

A PLEASANT little ceremony—of a kind that has now become quite usual in City circles—took place on Wednesday night at the Savoy Restaurant, when Mr. Charles O. West was banquetted, on the eve of his departure for West Australia, where he is to represent the Hannan's Development and Finance Corporation. A large company, fully representative of the industry, assembled for the purpose of assisting in the function. Mr. J. M'Millan presided, and the gathering included, among others, Messrs. W. O'Malley, M.P., C. W. Grimwade, D. T. Davis, J. S. Pearce, E. Norton, C. W. Foster, W. J. Carruthers Wain, Walter R. Skinner, J. Butterworth, J. F. Maguire, Mitchell Henry, A. G. Sboolbred, A. King, E. Beall, W. O. Attree, E. C. Ouvry, A. Goddard, S. Hunt, G. G. Elrington, W. G. Nugent-Hayter, H. Wedlake, H. Reeve, E. Rose, E. Bruison, Shackel, W. T. Rushton, G. With, J. Brice, H. Dave, W. S. Woodhead, H. Heaven, G. Orange, Gowan, J. B. Guthrie, T. Hobson, J. B. Foster, D. Fairweather, A. Molyneaux, H. M. Morris, and H. W. Walmsley.

The board having been cleared,

The Chairman, at the commencement of the after-dinner proceedings, explained that his presence in the chair was due to the illness of Major-General Bates, who was to have presided, and who in the letter apologising for his absence, and addressed to the company, said:—"I feel sure that we have acted wisely in selecting Mr. West to represent us in West Australia, and I wish him a prosperous voyage and God speed."

The Chairman then submitted the toast of "The Queen," remarking that the English nation were now approaching a most interesting period—the culminating period—in Her Majesty's reign, for by next month she would have ruled over the country longer than any monarch who had preceded her, while by next July she would have attained a reign of 60 years, a duration which was quite unprecedented. During the time Her Majesty had been on the throne a great many gems had been added to the crown, but there was none more brilliant than West Australia, to which at this moment so much attention was being directed.

The toast was enthusiastically honoured.

The Chairman then proposed "The Health of Mr. Charles West," saying he had expected to spend a quiet evening upon that occasion, and to have been able to say with their Gallic neighbours—*Je banquette et donc je suis.* He had, in fact, been a good deal surprised at being asked to preside, but at the same time had been unable to refuse the honour. They were assembled that evening for the purpose of bidding "God speed" and "*Bon voyage*" to Mr. West, and of wishing also prosperity to the Hannan's Development and Finance Corporation, which he was going to West Australia to represent. He had had the pleasure of knowing Mr. West some time previously, and also of proposing his health, albeit in somewhat more subdued tones. Mr. West had commenced his active career in Cape Town in the year 1881, when he was associated in a confidential capacity with one of the most prominent members of the Legislature. From 1881 to 1885 Mr. West was engaged in various pursuits having for their aim and object the benefit of his fellow men. Subsequently, he went to Madagascar, and then to the Mauritius, where he was engaged for some time in intercolonial trade. A return to Capetown was followed by visits to Johannesburg, Pretoria, and Barberton, in the latter of which places he discovered the Sheba Mine. In comparing West Australia with the Transvaal, it was nothing short of marvellous to see the progress which had been made in the former country in so short a time, and it was impossible not to be struck with the potentiality of richness which existed there, and which had undoubtedly led to West Australia becoming one of the most valuable mining countries in the world. It should, moreover, be remembered that West Australia was under British rule, and was, therefore, freed from the difficulties and risks connected with mining operations conducted in other countries. In conclusion, he could only trust that the luck which had attended Mr. West in the discovery of the Sheba Mine would be followed by equally successful results in Western Australia. (Applause.)

Mr. West, in replying said, in his opinion Western Australia had a great future before it, everything to-day pointing to Coolgardie as being the Johannesburg of the future. The disadvantage under which Coolgardie had suffered in the past was mainly owing to a lack of water; but that was a difficulty which had been overcome by the Government of Western Australia, who had voted something like 2½ millions sterling for the purpose of providing Coolgardie and the kindred districts with water. The development of the country would, moreover, be greatly assisted by recourse to the so-called dry process, which provided for the crushing of the quartz without water. The Hannan's Development Company's property was situated between the best known and the best dividend-paying mines in Western Australia, and with the capital, the staff, and the prestige which he had at his back, he had not the slightest doubt that at the end of his visit to Western Australia, he would be able to render a good account to the shareholders in whose interests he was going out. (Applause.) Although he had no desire to throw off the old love so early, he could not help admitting that the mines of Western Australia offered vastly superior prospects to those of South Africa, seeing that the quartz ran to from 20 ounces to 30 ounces per ton, while the reefs ran to about 3 feet in width. Moreover, the labour question was in a far more satisfactory position in Western Australia than was the case in South Africa. In this connection he might, perhaps, quote the remarks of Mr. Algernon Moreing, whose name was so well known in connection with West Australian mining. At a recent meeting Mr. Moreing said:—"It is now about two years only since we first heard of the richness of the discoveries which were then being made at Hannan's (now Kalgoorlie) and the White Feather, which is now known as Kanowna. It was, of course, predicted that these were only surface discoveries, and could not possibly last down, and there was all the pessimistic talk which usually accompanies a new discovery. But two years of steady development have proved conclusively that the gold field of Hannan's is undoubtedly the richest and most permanent gold field that has ever been discovered in the history of the world. That, to my mind, is now absolutely and conclusively proved. It is no more a question of theory or conjecture. There are veins which have been proved down into the hard rock 200 feet below the surface, which are in places 20 and 30 feet wide, and yielding 2 and 3 ounces to the ton all through. This is the result, not of mining engineers' inspections and theoretical reports, but facts that have been proved by batteries and tested by large crushings." These statements, in view of their authorship, appeared to him to be sufficiently remarkable to warrant quotation. As to the company with which he was connected, he had not the slightest hesitation in saying that when he returned to England he would be able to appear before the shareholders of the Hannan's Development and Finance Corporation, and to render an account of his stewardship while in Australia, of which he would certainly not be ashamed. (Applause.)

Shortly afterwards the company separated.

Railways in Venezuela.—A railway now in course of construction in Venezuela is entirely under German auspices. It is 180 kilometres in length, half of which is most troublesome mountaineering work, with no fewer than 86 tunnels, 60 iron viaducts, and 140 bridges. The Government of Venezuela has guaranteed 7 per cent. interest for 99 years on the expense of construction, which amounts to £3,200,000. Only German material has been contracted for, amounting to 50,000 tons—viz., rails from Krupp of Essen, the "Union" of Dortmund, and the Gute of Hoffnungshütte of Oberhausen; locomotives from Hertmann of Chemnitz; passenger and goods wagons from Van der Zypen and Charlier of Cologne-Deutz; and axles and wheels from Krupp. Only German capital is employed, the construction being undertaken by the Disconto Gesellschaft of Berlin and the Norddeutsche Bank of Hamburg.

LATEST FROM THE MINES.

CABLEGRAMS AND TELEGRAMS.

ACHILLES GOLD FIELDS.—Extract from cablegram received from the managing director at the mine:—"Put machinery into thorough repair. Crushing, August 17."

ALASKA MEXICAN.—Cablegram from Alaska reports the clean-up for the month of July as follows:—"Period since last return, 31 days; bullion shipment, $15,981; ore milled, 6670 tons; sulphurets treated, 126 tons; of bullion there came from sulphurets $5760; working expenses for period, $11,344."

BARBERTON GOLD FIELDS (South).—We are officially informed that the new reef, assayed by Messrs. Johnson, Matthey, and Co. and F. Claudet, averages over 2 ounces of gold per ton.

BRITISH BROKEN HILL PROPRIETARY.—Copy cablegram received August 14:—"Jigged 2200 tons crude ore, producing 930 tons concentrates, containing 580 tons lead and 9500 ounces silver."

BLAGROVE'S FREEHOLD.—The directors have received the following telegram from the manager, viz.:—"Crosscut has been driven 17 feet for the week. Have intersected a reef 9 inches wide. Judging from the appearances of the reef developments promise well. Crosscut to the north has been driven 10 feet. There are indications of improvement."

BROWN HILL NORTH (Hannan's).—The following information is to hand from the company's representative at Kalgoorlie: I am pleased to say that we are getting very much better stone from Hun shaft, the prospect obtained from the dish being most favourable.

BUNYIP GOLD.—The following cable, dated Albany August 7, has been received from the managing director, Mr. W. H. C. Lovely: "The main shaft has been sunk to a depth of 65 feet, timbering shaft. Drift from the incline shaft is now 6 feet, the ore in the drift will average 8 ounces."

BAKER'S CREEK.—Result of crushing to August 7:—655 ounces retorted gold.

BARDOC GOLD.—The following cablegram has been received from the company's manager at Bardoc:—"Have struck a very rich pocket of ore in No. 2 shaft, worth 70 ounces of gold per ton."

BLOCK B. LANGLAAGTE.—Production for July. By cable: "Mill. Ore crushed, 9060 tons of 2000 lbs.; gold retorted, 2353 ounces.—Tailings, cyanide process. Tons treated, 4730 tons of 2000 lbs.; gold recovered, 410 ounces.—Concentrates, cyanide process. Tons treated, 182 tons of 2000 lbs.; gold recovered, 312 ounces; total gold recovered, 3075 ounces."

CASSEL COAL.—The London secretary has received a cablegram giving the output for month of July as 27,000 tons, profit £6100, being highest figures yet recorded.

CAYLLOMA SILVER.—A cable has been received from the manager of the mines reporting July production:—"15,500 ounces fine silver in export ores, and 11,505 ounces fine in bullion."

CHIAPAS.—Copy of cable received from the manager, August 8:—"During July the concentrating mill ran 24 days; 1850 tons of ore were crushed, yielding 75 tons of concentrates. The stamp mill ran 25 days; 975 tons of tailings were crushed, yielding 116 ounces of gold."

COLOMBIAN HYDRAULIC.—The following cablegram of the result of run No. 208 has been received:—"We have cleaned up after washing 500 hours. The gross returns are £2000. The net profit is £300. Have been delayed by ground cut. Water very scarce."—Note. This is three months' cost against one month's returns.

CRIPPLE CREEK PIONEERS.—We are informed that this company has bought the Vulcano Mine, situated on Gold Hill, Cripple Creek, Colorado, and that the property is a well-developed one, having two shafts—one sunk 150 feet and the other 70 feet. They are already on ore assaying 4 ounces of gold per ton.

CROWN REEF.—Results for July, received by cablegram from Johannesburg:—"Number of days working 120 stamp mill, 29 days 11 hours; crushed by 120 stamp mill, 17,431 tons. Yield in smelted gold from 120 stamp mill, 6508 ounces; yield in smelted gold from 120 stamp cyanide works, 4503 ounces; total, 11,011 ounces. Working expenditure:—120 stamp mill and cyanide works, 17,431 tons milled. To mining, transport, milling cyanide, general charges, maintenance, and mine development, £23,154. Revenue.—By gold account—6508 ounces from 120 stamp mill, £22,299; 4503 ounces from 120 stamp cyanide works, £14,009; total, £36,308. Profit for month, £13,154. Revenue per ton crushed, £2 1s. 7·91d.; cost, £1 6s. 6·80d.; profit, 15s. 1·11d."

DAY DAWN BLOCK AND WYNDHAM.—Cablegram from the general manager at Charters Towers gives the result of the crushing for the fortnight ending the 8th inst.:—"Tons crushed, 1318; yield of gold, 1265 ounces; approximate value, £4400; fortnight's expenses, £2200."

DORIC GOLD.—The following cablegram has been received from the company's manager at the mines:—"Machine drills are doing excellent work. Cosmos tunnel driven 131 feet for 22 days July. Have struck ore of fair quality. Assay ore of fair quality in Cosmos tunnel. Adit level No. 2 driven 30 feet."

EAST MURCHISON UNITED.—A cable from the mine states that the manager will commence crushing ore on September 1 next.

EASTLEIGH DEEP.—The London office has been advised by cable that the provisional agreement for the sale of 100 claims to Eastleigh Block "A" Gold Mines (Limited) has been confirmed at the extraordinary general meeting held at Johannesburg on the 10th inst.

FERREIRA.—Copy of cablegram received from Johannesburg, August 10. Results for July:—"Crushed, 10,709 tons. Bar gold extracted, 8262 ounces. Concentrates caught 280 tons. Assay value of concentrates, 6 ounces 10 dwts. fine gold per ton, equal to (say) 1820 ounces.—Cyanide works. Bullion produced from tailings, 3519 ounces. Total gold from all sources, 13,601 ounces."

GELDENHUIS DEEP.—The following cablegram has been received from the mine manager, dated 10th inst.:—"Mill ran 27 days; crushed from mine 11,680 tons, yielding 3090 ounces. Cyanide treated 8100 tons, yielding 2090 ounces; total yield, 5180 ounces; profit for month, £2400."

GELDENHUIS MAIN REEF.—Result of July crushing, 3277 tons crushed, yielding 1031 ounces of gold. 2250 tons treated by cyanide, 464 ounces of gold. Total, 1495 ounces of gold. Profit for month, £721."

GEORGE GOCH AMALGAMATED.—The following cable is to hand advising work done during July:—"9348 tons crushed, yielding 2218 ounces gold and 1490 ounces from tailings."

GREAT EASTERN COLLIERIES.—Profit for month of July £3200.

GELDENHUIS ESTATE AND GOLD.—Copy of cablegram received from the head office, Johannesburg, reading:—"Last month's (July) profit was £7200."

GLENCAIRN MAIN REEF.—Production for July, 3824 ounces, 100 stamps, 27 days.

HADLEIGH CASTLE.—Latest advices received from manager as under: "Have crushed 240 tons, yielding 193 ounces go'd."

HERBERT.—Cablegram received from the managing director;—"Tailings have been treated, and give 1 ounce 16 dwts. 18 grains per ton. This, with the results already announced, gives a total of 5 ounces 13 dwts. 16 grains per ton of ore crushed."

IMPERIAL WESTERN AUSTRALIAN CORPORATION.—The directors have received a cablegram from their manager at Western Shaw to the effect that machinery is nearly erected, that crushing will commence about the end of this month, and that rich ore has been struck on Siffleets lease.

JUMPERS.—Results for July:—A cablegram has been received from the head office, at Johannesburg, stating the following results for last month:—"Crushed, 10,291 tons. Obtained from mill, 3807 ounces of gold. From concentrates, equal to 577 ounces of gold. From tailings by cyanide, 576 ounces of gold. Total, 4960 ounces of gold. Profit for month amounted to £1910."

KAURI FREEHOLD GOLD ESTATES.—Cablegram received in London states that since the Companies Mining Regulations were issued at Auckland, on the 7th inst., leases have been applied for to the extent of 920 acres. These leases will comprise isolated blocks varying from 60 to 100 acres each.

LAKE VIEW AND BOULDER JUNCTION.—The following cablegram has been received from the general manager, Mr. George Gray:—"Value ore bodies now going north. Lease No. 921 E improving. Bulk samples 1 ounce 17 dwts. per ton. Properties developing exceedingly well."

LAKE VIEW AND BOULDER JUNCTION.—The following cablegram has been received from Mr. George Gray, the general manager:—"Struck Ivanhoe lode at 107 feet in lease 1046 E. Bulk samples taken from the hanging wall from a width of 4 feet give 2 ounces 4 dwts. per ton."

LANGLAAGTE ESTATE.—Production for July. By cable: "Mill. Ore crushed, 22,732 tons of 2000 lbs.; gold retorted, 6628 ounces.—Tailings, cyanide process. Tons treated, 12,320 tons of 2000 lbs.; gold recovered, 1472 ounces.—Concentrates, cyanide process. Tons treated, 510 tons of 2000 lbs.; gold recovered, 1153 ounces; total gold recovered, 9253 ounces."

LANGLAAGTE STAR.—Production for July. By cable: "Mill. Ore crushed, 4560 tons of 2000 lbs.; gold retorted, 784 ounces.—Tailings, cyanide process. Tons treated, 5507 tons of 2000 lbs.; gold recovered, 814 ounces.—Concentrates, cyanide process. Tons treated, 172 tons of 2000 lbs.; gold recovered, 218 ounces; total gold recovered, 1816 ounces."

LAWLER'S.—Bullion produced for the fortnight during month of July, $4300. Pipe line completed; there is now an abundant supply of water. Production will increase for this month.

LYDENBURG MINING ESTATES.—Results for July:—From mill. Crushed 4779 tons, obtained 3293 ounces of gold. From cyanide works. Treated 2373 tons, yielding 1648 ounces of gold. Total yield, 4941 ounces of gold. Total value of month's output, £14,843.

MACATE.—Cable received August 10:—"34 days run, 350 tons crushed, 180 ounces. £310 bullion shipped."

MAY CONSOLIDATED.—The following cable message, dated Johannesburg, August 6, has been received at the London office:—"The yield of gold during the past month (July) was 3521 ounces from 10,750 tons crushed. Mill running 24 days. Cyanide, 1220 ounces from 6000 tons; total for month, 4741 ounces."

MENZIES PIONEERS.—Mine manager cables as follows:—"July 30. 1404 main shaft 159 feet deep, hard diorite. North-west shaft, the eastern cross cut, 39 feet level, 55 feet from the shaft. The drive north on the lode is now in 20 feet formation; 4 feet contains quartz 1 foot; quartz will average about 34 dwts. per ton; 91 feet, same cross cut, the drive north on the lode is now in 22 feet formation; 12 feet contains quartz 3 feet 6 inches. Quartz will average about 27 dwts. per ton."

MEYER AND CHARLTON.—July working crushed 8500 tons. Gold won 2749 ounces. Extracted from tailings 1500 ounces. Total, 4249 ounces. Profit for month, £4771."

MOUNT MORGAN (Queensland).—Results for the month of July:—Tons chlorinated 9786, gold returned 13,090 ounces.

MOODIE'S GOLD MINING AND EXPLORATION.—The returns for last month are:—625 claims rented; 960 tons; 790 ounces.

MONASTERY DIAMOND.—A cable received 14th inst. states that "347 loads last week yielded 30 carats."

MOUNT USHER.—The following cable has been received from W. Smyth, M.L.A.:—"Mount Usher crushing 44 tons, yielding 180 ounces of gold. Have secured south ground."—Note. The latter part of cable refers to additional ground secured on the strike of the reef at its southern end.

MOLYNEUX CONSOLIDATED.—July 16: Molyneux shaft No. 3 level, No. 4 north, a reef 2 feet thick; average assay of ore is 7 ounces to 8 ounces.—July 24: Level No. 4 unchanged, prospects are decidedly encouraging.—July 31: Molyneux. During the past week the development consists of 170 feet.—Level No. 4. Latest assays 29 dwts. over reef 3 feet.—August 12: Level No. 4 have driven 13 feet July 27 to August 8. Average assay of ore is 37 dwts. over 2 feet reef, at its maximum width 2 feet 6 inches. The last cable showing that in one month 39 feet were driven on a 2 feet reef averaging 37 dwts.

MOUNT MAGNET.—The following cablegram has been received from the general manager, dated August 10:—"Have cut a body of ore assaying 3 ounces of gold per ton of 2240 lbs. The main workings are south shaft. The width of the lode is 2 feet."

MOUNT LYELL MINING AND RAILWAY.—Cabled advices have been received from this company's head office at Melbourne respecting smelting operations from June 25 to July 30. During this period 2588 tons crude ore, averaging about 6 per cent. copper, 6 ounces 5 dwts. silver per ton, 3½ dwts. gold per ton have been treated, and have produced 224 tons converter matte containing 114 tons copper, 9373 ounces silver, 320 ounces gold. Also 129 tons first matte containing 28 tons copper, 1489 ounces silver, 78 ounces gold, which have yet to be reduced into converter matte. The gross amount of above quantities is £9975 at the present London quotation. Cost of mining and smelting 2588 tons, £2555 13s., equal to 19s. 9d. per ton ore. Further costs per ton ore, 12s. 3d. (it will be necessary to produce blister copper from converter matte) inclusive of all charges, treatment, shipment, realisation in Europe, making present estimated total expense £1 12s. per ton ore, leaving estimated profit £5834, equal to £2 5s. 1d. per ton of this class ore. Metallurgist reports pyritic smelting complete success, and that in future the cost of treatment will be reduced as the furnace plant is extended. The above returns are from one smelter. The furnace has treated, from July 9 to July 30, an average of 99 tons crude ore daily in addition to the first matte returned to furnace. Future returns will be published every four weeks.

NEW MODDERFONTEIN.—A cablegram has been received from the head office, Johannesburg, dated August 12, reading as follows:—"Crushed 7201 tons, yielding 2227 ounces; cyanide, 923 ounces; total, 3150 ounces.

NEW CHIMES.—The result of last month's crushings yielded 2319 ounces of gold.

NEW CRŒSUS.—Production for July (60 stamps 28 days), 2577 ounces.

NEW MIDAS ESTATE AND GOLD.—Results for July:—A cablegram has been received from the head office, Johannesburg, stating the following results for last month:—"Crushed, 1395 tons. Obtained from mill, 421 ounces of gold. Obtained from cyanide works from 735 tons of tailings treated 310 ounces of gold. Total, 731 ounces of gold."

NEW PRIMROSE.—Production for July, 10,752 ounces, 160 stamps, 27 days. Profit for July £10,307.

NORTH BURGESS.—Cable received from the mine manager July 7:—"A trial crushing of 101 tons has yielded 75 ounces 5 dwts. of smelted gold. An average sample of the tailings assayed 15 dwts. per ton; 6 cwts. of concentrates, assay value 20 per ton. Have struck upon very good stone to the east of No. 2 shaft. Promises to become a very fine stope of ore. Shall I continue to crush at the present low rate 500 tons parcels? Cable full instructions."

NORTH BOULDER.—The following cable, dated August 14, has been received from the manager of the mine:—"Have struck water in mine."

PAN AMERICAN.—Cablegram from the manager at Cripple Creek, August 8:—"We have shipped a cart load of ore to-day."

PALMAREJO.—Return for July:—Crushed, 2050 tons, Worked, 2000 tons, producing $49,500. Expenses, $35,500.

PRINCESS ESTATE.—Result of working for July:—Crushed, 3513 tons. Gold won 1697 ounces. Extracted from tailings, 735 ounces. Total, 2432 ounces.

ROODEPOORT.—Production for July, 1358 ounces, 40 stamps, 24 days.

ROBINSON GOLD.—Production for July: By cable. "Mill. 120 stamps at work. 15,600 tons of ore crushed. Yield in smelted gold, 10,807 ounces. From concentrates (by chlorination), 882 ounces. From tailings (cyanide process), 3013 ounces. From slimes, 1425 ounces. From own ore, 16,127 ounces. From concentrates bought (by chlorination), 4485 ounces. Total gold recovered, 20,612 ounces. Profit for month £35,000."

SAN SALVADOR SPANISH IRON ORE.—The s.s. *Craigendoran* sailed from Santander on the 8th inst. with 1850 tons of this company's ore for Glasgow.

SHEBA.—The following cablegram has been received from the general manager:—"Struck a rich body of ore 13 level; have started removal Sheba battery."

SIMMER AND JACK PROPRIETARY.—Crushed 13,700 tons. Obtained 5826 ounces from mill, 603 ounces of gold by chlorination, and 2426 ounces of gold from tailings by cyanide during the month.

SOUTH KALGURLI.—The following cable has just been received from the manager at the mine: "Have struck water in main shaft.—Quick."

ST. JOHN DEL REY.—The following telegram was received from Mr. Chalmers on Wednesday:—"Produce month of July, 31,000 oitavas, equal to 3573 ounces troy; value, £12,012; yield per ton, 5·2 oitavas (0·60 ounces troy)."

TAMWORTH.—Telegram from Dr. Pratt, of Tamworth (N.S.W.), dated August 11:—"The yield amounts to 96 ounces of retorted gold. This yield is from 22 tons crushed during six days on half time."

TREASURY.—Cable received from the head office, Johannesburg:—"Treasury output for July, 5579 tons crushed, yielding 2584 ounces in bullion. Estimated value, £8242."

TRANSVAAL COAL TRUST.—The following cablegram has been received from the head office at Johannesburg, as bearing on the company's operations for the month of July, viz.:—"Output 33,000 tons, profit £2700."

UNITED IVY.—Last month's output was 685 ounces. Mill has been working day and night for 17 days, and has crushed 960 tons.

VICTORIA REEF.—The following cablegram, dated August 12, has been received from Messrs. F. W. Prell and Co., the company's agents:—"Hill, the new manager, reports much pleased with the appearance. I consider it a most valuable property; four different pannings give good results, not less than 2 ounces per ton, from the 100 feet level. I expect to be able to strike sufficient water available to run all machinery on or before 200 feet. Pushing forward with all possible speed. Crushing has not started."

WEMMER.—The following cable is to hand:—"The result of work done during July is as follows:—6770 tons crushed, yielding 3350 ounces of gold, 29 days; and from cyanide plant 5000 tons treated, yielding 916 ounces, and from concentrates 147 tons caught assaying 85 dwts. (4 ounces 5 dwts.) The profit for July is £4950."

WESTERN ANDES.—The directors have received advices dated June 19, by which it appears that the profit at the mines for May was £102.

WENTWORTH GOLD FIELDS PROPRIETARY.—The following cablegram has been received from the mines:—"Four week's return totals 1052 ounces of gold (approximate value, £4860)—namely, 740 tons of ore have been crushed, yielding 1000 ounces; and 2 tons rich crude ore have been shipped, containing 52 ounces."

WOLHUTER.—Result of operation for July:—100 stamps, crushed 13,810 tons, produced 4148 ounces; cyanide, 1987 ounces. Total, 6135 ounces.

COMPANIES AND LEGAL ANNOUNCEMENTS.

*** Advertisements are inserted in this column at the rate of 9d. per line, with a minimum charge of 7s. 6d.**

IN the HIGH COURT of JUSTICE, Chancery Division, Mr. Justice STIRLING. 1896, N. 086.—In the Matter of NIXON'S NAVIGATION COMPANY (Limited and Reduced); and in the Matter of the Companies Acts, 1867 and 1877.

Notice is hereby given, that a PETITION has been presented to Her Majesty's High Court of Justice, Chancery Division, for CONFIRMING a RESOLUTION of the above Company for reducing its CAPITAL from £780,000 to £546,000. A List of the persons admitted to have been Creditors of the Company on the 22nd day of July, 1896, may be inspected at the offices of the Company at Cardiff, or at the office of the undersigned at any time during the usual business hours on payment of the charge of 1s. Any person who claims to have been on the last-mentioned day, and still to be, a Creditor of the Company, and who is not entered on the said List, and claims to be so entered, must on or before the 1st day of October, 1896, send his name and address and the particulars of his claim, and the name and address of his Solicitor (if any) to the undersigned at 28, Bedford Row, London, W.C., or in default thereof he will be precluded from objecting to the proposed reduction of Capital.

Dated this 5th day of August, 1896.

H. F. CHURCH, Chief Clerk.

GADSDEN and TREHERNE, 28, Bedford Row, London, W.C., Solicitors for the said Company.

The LIST will CLOSE on SATURDAY, the 15th inst., for LONDON, and MONDAY, the 17th inst., for the COUNTRY.

Subscriptions are invited by the following Companies, viz.:—
THE WEST AUSTRALIAN GOLD FIELDS, Limited,
THE WEST AUSTRALIAN SHARE CORPORATION, Limited,
THE COLONIAL GOLDFIELDS, Limited,
THE SCOTTISH COLONIAL GOLDFIELDS, Limited,
THE INDIAN AND COLONIAL GOLDFIELDS, Limited.

THE NEW ZEALAND MINERALS COMPANY, LTD.

Incorporated under the Companies Acts, 1862 to 1890.

CAPITAL £250,000,

In 250,000 Shares of £1 each, of which 247,500 are Ordinary Shares, and 2500 are Deferred Shares.

The Deferred Shares will not be entitled to participate in the profits of any year, until 20 per cent. for that year has been paid on the Ordinary Shares, when they will be entitled to one-half of the remaining profits.

FIRST ISSUE OF 100,000 ORDINARY SHARES AND 1000 DEFERRED SHARES.

(Each Subscriber to this Issue will be entitled to one Deferred Share, payable in full on application, for each 100 Ordinary Shares allotted.)

THE ORDINARY SHARES ARE
PAYABLE—2s. 6d. per Share on Application,
2s. 6d. per Share on Allotment,

And the balance in Calls not exceeding 5s. per Share, as and when required, at intervals of not less than two months.

DIRECTORS.

The Right Hon. Lord CASTLETOWN, Chairman West Australian Gold Fields, Limited (Chairman).
Lord ARTHUR BUTLER, Chairman Hampton Plains Estate, Limited.
OLIVER WETHERED, Esq., Chairman West Australian Share Corporation, Limited.
A. JOHNSTONE DOUGLAS, Esq., Chairman Scottish Colonial Gold Fields, Limited.
G. H. M. BATTEN, Esq., Chairman Hyderabad Deccan Company, Limited.
RICHD. POPKISS, Esq., A.M.Inst.C.E. (Managing Director).

LOCAL DIRECTORS.

Hon. J. W. M. LARNACH, C.M.G., late Minister of Mines and Public Works, New Zealand.
Hon. THOMAS FERGUS, late Minister of Mines and Public Works, New Zealand.
NEIL KENNEDY, Esq., M.Inst.C.E., Manager and Engineer.

BANKERS.

LONDON AND SOUTH-WESTERN BANK, LIMITED, 170, Fenchurch Street, E.C.

SOLICITORS.

Messrs. NEISH, HOWELL, and MACFARLANE, 66, Watling Street, E.C.
S. D. SIONEHAM, Esq., 2, St. Michael's House, Cornhill, E.C.

BROKERS.

London—Messrs. BARBER and BRIDGFORD, 2, Drapers' Gardens, E.C.
Messrs. G. A. PHILLIPS and Co., 73, Cornhill, E.C.
Edinburgh—Messrs. HARDIE and TURNBULL, 42, George Street.

AUDITORS.

Messrs. MONKHOUSE, STONEHAM, and Co., 23 to 31, St. Swithin's Lane, E.C.

SECRETARY AND OFFICES.

E. R. TASMAN, Esq., 3, Laurence Pountney Hill, E.C.

PROSPECTUS.

This Company has been formed to conduct the business usually carried on by an Exploration, Development, Finance, and Agency Company, more particularly with regard to Gold Mining in New Zealand.

The remarkable development in gold mining in New Zealand, and the satisfactory results which have been obtained by the adoption of skilled management and modern methods of treating the ores, are evidence that this field offers great opportunities for the profitable investment of capital.

Several of the Directors are intimately connected with similar Exploration Companies in West Australia and elsewhere, and bring with them valuable experience.

The following extract, taken from the Government Mines Statement of 1895, gives the quantity of Gold entered for exportation from New Zealand in the year ending March, 1895, together with the total quantity and value from 1857 to the latter date.

DISTRICTS.	Year ending 31st March, 1895. Quantity. Ounces.	Value. £	Total from January, 1857, to 31st March, 1895. Quantity. Ounces.	Value. £
Auckland	58,029 ...	228,059 ...	1,647,980 ...	6,959,604
Wellington	— ...	— ...	188 ...	7 6
Marlborough	1,911 ...	7,623 ...	51,029 ...	215,181
Nelson	1,633 ...	6,059 ...	246,615 ...	975,602
West Coast...	85,015 ...	339,731 ...	5,517,080 ...	21,921,556
Canterbury	— ...	— ...	48 ...	192
Otago	76,791 ...	303,070 ...	5,130,985 ...	20,283,482
Totals	222,981 ...	889,545 ...	12,823,925 ...	50,456,423

Arrangements have been made whereby the services of Professor James G. Black, M.A., D.Sc. Edin., Professor of Chemistry in the University of Otago, and his late Assistant, L. O. Beale, Jun., Civil and Mining Engineer, Dunedin, are secured for the purposes of this Company as Investigating and Reporting Engineers.

Mr. Neil Kennedy, an Engineer of repute and great experience, has agreed to undertake the management of the Company's business in New Zealand, and sailed for that place on the 3rd inst.

In March last Messrs. Heasman and Company (Limited) entered into an agreement with, and sent out to New Zealand, Mr. Robert Andrew (one of the pioneers of New Zealand mining), who has secured options on several properties which are believed to be of great value.

The benefit of Mr. Andrew's services, including the options already secured, will be transferred by Messrs. Heasman and Company (Limited) to this Company.

In order to ensure the successful introduction of this Company, Messrs. Heasman and Company, Limited, acting on behalf of themselves and The West Australian Gold Fields, Limited, The West Australian Share Corporation, Limited, The Colonial Gold Fields, Limited, The Scottish Colonial Gold Fields, Limited, The Indian and Colonial Gold Fields, Limited, and others, have agreed to guarantee the subscription of half the present issue of Ordinary Shares.

The consideration to Messrs. Heasman and Company (Limited) for the benefits of Mr. Andrew's services, options on properties, &c., transferred to the Company, as well as for the above-mentioned guarantee, will be the right to an allotment to them or their nominees of the 2500 Deferred Shares, less those to be allotted under the terms of this Prospectus.

The Company will pay all expenses connected with the present issue, including registration, legal expenses, and brokerage.

The following Contracts have been entered into by or on behalf of the Company:—(1) dated 6th August, 1896, with Heasman and Company (Limited). (2) dated 31st July, 1896, with Neil Kennedy for his appointment as Local Manager and Director, which, together with the Memorandum and Articles of Association, can be inspected at the Offices of the Solicitors of the Company.

Prospectuses can be had of the Bankers, Brokers, Solicitors, and Auditors, and at the Company's office. Applications for Shares should be made on the form accompanying the prospectus, and forwarded, together with the amount of the deposit, to the Company's Bankers. In case no allotment is made to any applicant the deposit will be returned in full.

London, 10th August, 1896.

THE Association of Mines of the South African Republic have cabled to their London agents, the Robinson South African Banking Company (Limited), that for the month of July an output amounting to 35,352 ounces was obtained by the following companies:—Roodepoort United Main Reef, Meyer and Charlton, Princess Estate, Van Ryn, George Goch (Amalgamated), Wemmer, Langlaagte Estate, Block B Langlaagte Estate, Lancaster. This compares with 33,707 ounces in the preceding month. The Robinson South African Banking Company (Limited) have also received the following particulars:—Langlaagte Estate. Production for July. By cable. Mill. Ore crushed, 22,732 tons of 2000 lbs.; gold retorted, 6628 ounces. Tailings, cyanide process. Tons treated, 12,320 tons of 2000 lbs.; gold recovered, 1472 ounces. Concentrates, cyanide process. Tons treated, 510 tons of 2000 lbs.; gold recovered, 1153 ounces; total gold recovered, 9253 ounces.—Block B Langlaagte Estate Gold Mining Company (Limited). Production for July;—By cable. Mill. Ore crushed, 9060 tons of 2000 lbs.; gold retorted, 2353 ounces. Tailings, cyanide process. Tons treated, 4730 tons of 2000 lbs.; gold recovered, 410 ounces. Concentrates, cyanide process. Tons treated, 182 tons of 2000 lbs.; gold recovered, 312 ounces; total gold recovered, 3075 ounces. The Langlaagte Star Gold Mining Company (Limited).—Production for July. By cable. Mill. Ore crushed, 4560 tons of 2000 lbs.; gold retorted, 784 ounces. Tailings, cyanide process. Tons treated, 5507 tons of 2000 lbs.; gold recovered, 814 ounces. Concentrates, cyanide process. Tons treated, 172 tons of 2000 lbs.; gold recovered, 218 ounces; total gold recovered 1816 ounces.

REPORTS FROM THE MINES.

BRITISH MINES.

DEVON GREAT CONSOLS.—William Clemo, August 13: The different points of operation at Wheals Anna Maria, Josiah, and Emma continue without alteration. The weather is still very dry, and the water at Wheal Anna Maria is up to the 124 fathom level and at Wheal Josiah to the back of the 144 fathom level. At Watson's the water has reached the 70 fathom level. The plunger and Agnes wheels are still going, and the large calcining tube at the arsenic works is also doing well.

LEADHILLS.—W. H. Paull, August 10: Brown's vein, In Gripp's adit driving south of Wilson's shaft the vein is 4 feet wide of a promising character containing a strong mixture of spar and lead ore, worth 35 cwts. per fathom. The railroad in this level south of flatrod shaft having been removed some years ago, has now to be relaid, and consequently the drivage will have to be suspended for a short time owing to the accumulation of stuff there. The winze below the 50 fathom level north of main rise and south of Wilson's shaft has been holed to rise above the 70 and the men placed to drive the 60 fathom level northwards, where the vein is worth 30 cwts. of lead ore per fathom. The stope above the 50 south of Wilson's shaft is yielding 25 cwts. of ore per fathom. No change in crosscut driving eastwards at the 70 fathom level. In the 85 fathom level driving south of Wilson's shaft the vein contains more spar, but still unproductive for mineral. The vein in rise above the 115 fathom level north of Jeffrey's shaft contains strong spar and a mixture of lead ore, producing saving work. In drift south of No. 1 stope above the 115 fathom level north of Jeffrey's shaft the vein is at present yielding 5 cwts. of ore per fathom. The stope above the 115 fathom level north of Jeffrey's shaft is producing 25 cwts. of ore per fathom. In crosscut driving eastwards at the 100 fathom level the ground is without any change of note.—Raik vein. The 100 fathom level is being continued south-eastward through vein towards the hanging wall, and we are meeting with more spar but no ore as yet. The 100 fathom level north on this vein looks much the same as of late, and unproductive. The crosscut westward at Gripp's adit level south of Watson's shaft is going forward at a fair rate in congenial ground, and small branches of stone containing spots of lead ore are being intersected. A little water also issues from the forebreast. Other points of operation are without any material change. Water in mine is being lowered gradually. Weather again favourable for haymaking, and the greater part of the crop is nearly secured.

FOXDALE MINES (Isle of Man).—August 6: Beckwith's engine shaft is down the required depth for a new (290 fathom) level. Cistern plat has been cut and bearers fixed. The men at present are engaged upon some necessary repairs in the shaft, preparatory to the replacing of the two bucket lifts below the 245 with a plunger lift, and putting in the double skip and ladder roads below the 275 fathom level. We expect to be ready to commence with this work next week.—275 fathom level west. The portion of the lode carried in this driving has lately become unproductive. With a view to proving the full width of the lode, the forebreast has been suspended temporarily, and the men put to crosscut north. The lode in the end driving east is producing stones of lead, which look promising, but not sufficient, so far, to be of any great value. In this level we have commenced a system of crosscutting by rock drills to effectually prove the full width and value of the lode.—260 fathom level west. The lode in this driving is yielding about 30 cwts. of lead ore per fathom. A winze sinking from the 245 fathom level, which will come down in the roof of the present forebreast is worth fully 2½ tons of lead ore per fathom. There has been no particular change to report in the different ends driving in the upper part of the mine for some time past. Bawden's engine shaft is now in regular course of sinking below the 265 fathom level with a full force of men. Pott's shaft has been sunk sufficiently deep to allow for fork below the 200 fathom level, and in a few days we expect to have skiproads, &c., complete, to be able to wind from this depth.—Surface. Since the recent fall of rain I am pleased to say we have been able to work our dressing machinery, which for want of water was for several weeks previously at a complete stand, and in consequence of which a large quantity of orestuff has accumulated on the floors.—W. H. Kitto.

WEARDALE.—Report on Weardale Company's mines for the week ending August 6.—Groverake. In sinking the sump from 63 fathoms level we have got the sump cut out and have commenced to sink. Tribute ore for week 13 bings. —Boltsburn. Stopes in north flats from Watt's level worth 40, 40, 36, 24, and 18 cwts. per fathom. Stopes in south flats worth 20, 30, 30, 24, 24, 26, 1?, and 8 cwts. per fathom. Vein stope worth 20 cwts. per fathom. Little limestone drift east uncharged.—Greenlaws, Race's drift vein in forehead rather nipped, worth 18 cwts. per fathom. Stopes worth 20 and 18 cwts. per fathom. Slaley hazel drift east, very strong vein, worth 16 cwts. per fathom. Lowe's drift vein composed chiefly of spar mixed with ore, end worth 8 cwts. per fathom. Stopes worth 10, 12, and 12 cwts. per fathom.—Sedling 64 level east, strong vein composed of rider spar and little ore. There is probably more vein on the south side. Stope worth 10 cwts. per fathom. Stopes above 56 level east worth 14, 16, 10, and 12 cwts. per fathom.—Killhope. Sinking middle Grove shaft in Nattrass Gill Hazel we are now down 15 fathoms below Park level. Ore raised for the week, 52 tons. Ore dressed for the week, 97 tons. Ore smelted for the week, 84 tons, producing 51 tons of pig lead.

MISCELLANEOUS.

CHIAPAS.—Mine report for fortnight ending June 30?—Santa Fé hill drift No. 3 driven 5 feet 6 inches, total 213 feet. No change. Providencia crosscut east No. 1 driven 10 feet, total 376 feet. In soft clay rock. We are contemplating to suspend this drift. Francisco adit driven 25 feet, total 190 feet. Showing occasional spots of ore. Assay, gold, 3 dwts. 12 grains; silver, 1 ounce 17 dwts. 12 grains; copper, 69 per cent. Old Francisco crosscut north-west driven 7 feet 6 inches, total 87 feet 8 inches. Passed from wollastonite into clay rock. Assay, gold 1 dwts.; silver, 16 dwts. 12 grains; copper, 30 per cent. Taylor deep adit driven 30 feet, total 175 feet. The ground is a little softer. Francisco adit drift north-west driven 5 feet, total 65 feet. In fair ore. Assay, gold, 9 dwts. 12 grains; silver, 12 ounces 12 grains; copper, 3·67 per cent. Sylva crosscut No. 2 driven 8 feet 6 inches, total 121 feet 6 inches. No change, suspended *pro tem.* Pine Creek drift No. 1 driven 25 feet, total 15 feet. Passed through a body of poor ore some 6 feet wide, and still continues to show spots of ore. Assays, gold, 2 dwts.; silver, 1 ounce 13 dwts. 12 grains; copper 7? per cent. We purpose drifting on this ore in a direction at right angles to Pine Creek No. 1. Aver winze sunk 5 feet 6 inches, total 5 feet 6 inches, in opaline quartz and wollastonite, carrying pyrites. Assays gold 3 dwts. 12 grains, silver 6 ounces 6 dwts. 12 grains, copper 1·84 per cent. San Antonio prospecting drift has been driven 4 feet 6 inches, total 16 feet 6 inches. No change to notify. Taylor No. 3 winze sunk 2 feet 6 inches, total 70 feet. The ground is changing. We are apparently nearing contact of wollastonite and Taylor No. 3 deposit.—Extraction. Old Providencia. Extracted 230 tons very good ore. Assays gold 1 ounce, silver 11 ounces 6 dwts., copper 3·49 per cent.—Santa Fé stopes. Sent 93 tons of good ore to the mill.—San Juan stopes. Extracted 304 tons. Poor ore broken from the extreme backs of the stopes.—Assays. San Juan stope north. Gold 2 dwts. 12 grains, silver 2 ounces 9 dwts. 12 grains, copper 1·03 per cent. Upper portion of stope assayed gold 1 dwt., silver 2 ounces 10 dwts., copper 1·08 per cent.—San Juan stope south. Gold 3 dwts. 12 grains, silver 2 ounces 12 grains, copper 1·11 per cent.—Francisco adit and drifts. Extracted 163 tons of fair ore.

HANNAN'S LODE.—The following report has been received from the company's mine managers, Messrs. C. J. McCulloch and Co., of Kalgoorlie, dated June 24: The property comprises two gold mining leases 1362 E 12 acres, and 1363 E. 24 acres, and is situated ¾ mile north of Kalgoorlie town. It is within the auriferous belt and lies in the course of the lode formation running through the Kalgoorlie fields. The geological formation is identical with that of the rest of the auriferous belt, i.e., various schists alternated or crossed by bands of eruptive rock. A band of diorite outcrops to the south of lease 1362, and will probably be met with on the lease itself during its development. The surface of the property is much broken, being mainly ironstone hills or ridges, on which different lode formations outcrop, running both parallel and at angles. The most promising formations are in the eastern portion of both leases, and there is also a massive outcrop of ironstone cement near the north east corner of lease No. 1363. Colours of gold have been found in the flood channel taking its rise from this spot, and altogether I think that this part of the property demands attention and careful prospecting. There is every probability that systematic prospecting of the company's property will disclose ore bodies other than those at present being worked, as the leases are situated in a highly auriferous belt of country. As all the most favourable conditions are fulfilled—*i.e.*, lodes in a schist stone formation and eruptive rock in proximity or contact—I believe the property, with good management, will develop satisfactorily.

HANNAN'S LODE.—Report, dated July 4, from Messrs. C. J. McCulloch:—The number of men employed on the mine is 12 at current wages. During the fortnight a forge has been erected which will be a saving in the blacksmith's account. Sanitary arrangements have been carried out, and other surface work done. Timbers have been set in both shafts for carrying ladder ways. No. 1 drive in No. 1 shaft has been extended, making a total length of 78 feet. The shaft has been sunk a further depth of 7 feet, making a total depth from brace of 59 feet. No. 1 drive in No. 2 shaft has been extended a further distance of 7 feet making a total distance of 50 feet. The shaft has been sunk a further depth of 3 feet, making a total depth of 54 feet from brace. The lode improves in character underfoot, and the present level workings is very little below the general surface level of the surrounding country. I have decided to continue sinking before opening out in both shafts. No. 1 shaft will be worked by two shifts a day, and No. 2 shaft by one shift for the present. The country now being sunk through is about the same in both shafts, schist stone with hard bands of chrome iron and quartz, making it necessary to use explosives. The return of schist and quartz, stained with chrome iron, gives a little gold. The main body of quartz in No. 1 shaft improves in character as depth is attained.

LEICESTER CONSOLIDATED MINE.—The *Kimberley Advertiser* of July 11, 1896, contains the following article on the Leicester Diamond Mining Company's property, which has since been amalgamated with the larger property of the Leicester Consolidated Diamond Mines (Limited):—With an abundance of wood, a never-failing supply of water, and an experienced manager, the shareholders of the Leicester Diamond Mining Company (Limited) have all the elements of success in their property. The company own altogether 250 claims in the Leicester Mine, of which they are now working from 30 to 35. The ground is hauled by aerial gear, only one box being in use at present, but that hauls 500 loads per day, each day's hauling being washed and treated at once. The company are working a 50 feet face, and have sunk a further shaft to a depth of 45 feet. In a short time the wires will be transferred to the new shaft and the ground worked away to give a 90 feet face. Blue was struck in this shaft at a depth of 78 feet, but the area covered by the claims belonging to the company is calculated to give four or five years of work in the yellow, before the blue is tapped, and judging from experiences obtained at Jagersfontein, where the blue is worked down in the open to a depth of 400 feet without any serious reef difficulties, there are some 10 to 15 years of open work, before the company will have to undertake underground mining. Mr. Fyfe (the manager) has adopted a very economical method of working down the ground. Instead of expensive blasting work, a system of tunnelling is in use. The ground is first sectioned off by cutting down the face on either side. This admits of the amount of ground to be brought down being limited. A number of tunnels are then driven into the face, and these again cross-tunnelled. The pillars supporting the overhanging ground are then worked away until about 4 feet square, when a couple of packets of dynamite brings the whole lot down. Every bit of the ground, top stuff included, is washed, and hard lumps being carted away for future. The cost per load for hauling and treatment is very small. The 25 claims are in one block, and the row of prospecting holes around the boundaries, and the occasional heaps of yellow dotted about over the property show where Mr. Leicester has tested the ground, and proved the whole of the block to be well within the reef. A very much larger gear will be at work in about nine months' time. Fencing is to be commenced shortly, and this with the compound system which has been adopted will in all probability result in a considerably increased output. There are two washing machines—12 feet and 14 feet in diameter respectively. Sixteen white men and 170 boys are employed on the works. The engines employed to work the washing gear, the pulsator, the elevator for the tailings, and the pumping station, are a 16 horse power Paxman, 7 horse power Robey, 12 horse power Ransome, and a 4 horse power. The number of loads washed per day is 550; when the new gear comes into operation this will be increased to 5000, and subsequently to 8000—in each case per day of 10 hours. There are blacksmiths' and carpenters' shops on the premises, and the workmen here are kept constantly busy. The Compound is a strong, but comfortable structure, capable of accommodating 400 boys. In the centre there is a plunge and shower bath, with a plentiful supply of water, and all other necessary accommodation. Mr. H. Saunders, the manager of the Compound, has his quarters here and there is a shop from which the boys can obtain all the necessaries of life, clothing, &c. Adjoining the compound are the stables and forage room. The former is built to stable 30 horses, and is quite equal to present wants, the peculiarly favourable situation of the works entailing the use of very little animal labour. Since the company commenced work in December of last year, they have produced about 3000 carats of diamonds, the stones found in the mine being, as is well known, of a particularly valuable quality, averaging fully over 40s. per carat. Eighty thousand loads of ground have been washed, the result proving to be very remunerative. Once the anchorage is lowered, and the top rubbish and mixed yellow is worked off, it is certain that the mine will be a producer that will render a good account of itself. The machinery about to be erected by the Amalgamated Company will be capable of treating about 30,000 loads per week.

CHAMPION REEF (Nannine, W.A.).—Extract from manager's report, dated Nannine, July 4:—North Outcrop, Lease 10. An open cut about 22 yards long and 8 feet deep has been made along this outcrop, disclosing a very conspicuous body of stone of very superior quality. Mr. Dunstan estimates from 8 ounces to 10 ounces to the ton.

CONFEDERATE SYNDICATE.—Manager's report for fortnight ending July 4:—Tunnel is now in 286 feet. Shall put up another rise to the wash shortly. Hope soon to report that we are in payable wash dirt. Found wash last week on the other side of the hill thus proving that it goes right through the hill. Will prospect it next week, and if it should prove payable we shall have a field of wash dirt 660 feet wide and 3300 feet long. All the ground on the hill is now taken up.

GEM OF CUE.—Manager's report for month of June:—On June 16 I connected C underlay shaft with drive east from A vertical shaft. This part of the workings is now well ventilated. Total depth of underlay shaft is 152 feet. Have continued to drive west now 14 feet on course of reef. There is no material change in the nature of the lode since my last report. The main shaft I am pushing on as expeditiously as possible, concentrating the labour there. Depth is 78 feet.

LADY MAUDE.—The manager, under date of July 8, reports as follows: During the past fortnight the following work has been done. The Surprise main shaft has been sunk to a depth of 114 feet, all securely timbered, and I have started a crosscut west for the Surprise reef, distance driven 8 feet. I believe I am not far from the reef, as small droppers are coming in. The Maude main shaft has now reached a depth of 116 feet. There are two small veins in the bottom of the shaft lying in towards the reef. Yesterday I am very pleased to inform you I tapped water. Last night it made 150 gallons, and I have no doubt when I get a little lower I shall have quite enough to contend with. I will put down a well 20 feet before opening out No. 1 level. The water shaft has been sunk a further depth of 8 feet, making a total of 60 feet. The country is getting more solid. Besides sinking, I have completed 50 feet of timbering.

MOLYNEUX MINES CONSOLIDATED.—The manager reported on July 15 to the board:—No. 2 shaft 2nd level west. We have found the reef again, and are driving on it.—No. 2 winze west. We have encountered the reef again, and find it rising at an angle of about 70°. This bend in the reef evidently corresponds to the bend in the 3rd level of No. 3 shaft. Thickness of reef 7 inches.—No. 3 shaft. 1st level winze, reef 8 inches wide. 2nd level east, reef 4 inches wide. 4th level east, formation unchanged, reef 6 inches thick. 4th level west, reef 5 inches thick. I intend pushing this drive ahead, and have put in a machine drill during the week. 4th level north, formation lying nearly horizontal, reef 24 inches thick. From the assay returns it will be seen that this is undoubtedly the best reef we have encountered in the mine up to the present.—No. 13 shaft. Sinking was begun in this shaft to-day; the sump has taken us longer to cut than we expected, but we have the pump down now working very satisfactorily.—No. 13 shaft. No change in the formation.—Buildings. Plans and estimates of the costs of building the new general offices are being prepared by the foreman carpenter. These will be sent in as soon as completed.—July 7. Assay 4th level north 79 feet distance, 24 inches wide, 135 dwts. 21 grains over 24 inches reef.—July 9. Assay 4th level north 81 feet distance, 24 inches wide, 163 dwts. 21 grains over 24 inches reef.

MOODIE'S FORTUNA.—Report dated July 11 states that at a distance of 9 feet 6 inches from the N.N. reef another reef is intersected measuring over all 4 feet 9 inches, but is broken up by about 24 inches of country rock. Some of the quartz shows visible gold but to take an average sample of the whole it pans from 10 to 12 dwts.

NORTH BOULDER.—The manager reports under date June 30 as under:—I am pleased to report that the ore in the Friday lode (western boundary shaft) is improving in quality as the winze is sunk. This is now down 25 feet below the 50 feet level, and splendid stone showing rich gold wherever broken is now being sent up. The drive at the 50 feet is now in 102 feet along the lode, and I am crosscutting at the end to find the width. The western lode having been cut in the east crosscut middle shaft, I am now driving south on it, and we are in the Friday lode in the west crosscut. Everything is in a most promising condition, and it only remains to get water. This may take a week or two longer than I anticipated, but this is not of much consequence, and with the Friday lode driven on 102 feet and a depth of 80 feet, and width of probably 12 or 14 feet, you will see what a large body of good milling ore is in sight.—N.B. It may here be stated that under date of June 23 the manager reported that assay made of stone from Friday lode was as under.—From face of drive 50 feet level, 22 ounces 8 dwts. (80 feet along drive). From the winze 4 ounces 1 dwt.

VENTERSDORP GOLD ESTATES. — The following advices have been received dated July 17:—Palmietfontein borehole No. 1. This borehole has now reached a depth of 152 feet, and the manager's report continues as follows: At a depth of 132 feet a bed rock of freestone was intersected and drilled to the depth of 152 feet. Freestone has been found to be a bed rock in gold formations in the Heidelberg district; it is a very soft drilling rock, sometimes traversed by slate seams. I am sending per post cores of quartzite and freestone for inspection; part of the quartzite has a fair appearance, and I should advise an assay.—Modderfontein bore hole No. 11. Drilling has been resumed, and this borehole is now down to a depth of 86 feet, and continues in blue slate. The manager reports that he has taken several samples from one portion of this property, and known as Reef No. 2, but the pannings showed poor results. The company's agents at Johannesburg report that according to the law this farm has been surveyed, and is about 4000 morgen or about 8200 English acres.

(REPORTS FROM THE MINES SEE PAGE 1052.)

Warrants for the interim dividend of 3 per cent., free of income-tax, on the ordinary shares of the BLUE SPUR AND GABRIEL'S GULLY CONSOLIDATED GOLD COMPANY (LIMITED) have been posted.

NOTES ON THE WALRAND-LEGENISEL STEEL CASTING PROCESS.*

By H. L. HOLLIS, Chicago, Ill.

THE paper read by Mr. George J. Snelus in 1894, before the Iron and Steel Institute of Great Britain† so fully and ably described the Walrand-Legénisel process that there remains little to add beyond recording some changes in practice, made since that date, and observed by the writer last summer at several continental works, and the further fact that the process has now been for some time in successful operation in this country.

Briefly stated, the Walrand-Legénisel process is an addition to the Bessemer operation, with the object of obtaining quiet and more fluid steel, and consequently sound castings and ingots. This is achieved by adding ferro-silicon at approximately the time of flame drop in the ordinary Bessemer operation, and making an after-blow. The high calorific power of silicon is well known, and the rapid combustion of it immediately before pouring raises the temperature of the steel noticeably, and—what is likewise important—finishes the steel-making operation by the combustion of silicon to a solid (slag) instead of that of carbon to a gas. The consequent fluidity of the steel is well shown by the very small and intricate castings, running down to a fraction of a pound in weight, which are regularly made; but perhaps the best indication of the heat of the steel is shown by the fact that charges as small as 600 lbs. have been blown successfully for several years at Paris, and often the charge has been poured entirely into small work, taking from 15 to 25 minutes, without a sign of skull in the ladles. At the Potter and Hollis Foundry Company's plant, Chicago, heats of 1000 to 1200 lbs. of steel have often been poured by means of two hand ladles of 100 lbs. capacity (necessitating the refilling of each ladle five or six times) and not less than 20 minutes taken for the casting, and yet the ladles have been entirely free from skull at the end.

Bearing in mind the calorific power of silicon and its well-known influence in the Bessemer process, one is tempted to enquire whether all this has not been done before, but in the investigation of the patent a most thorough search made in the Patent Office reports, as well as metallurgical literature and proceedings of technical societies here and abroad, fail to show anything in any way similar.

The details of practice vary considerably at the different works where this process is employed, but the features in common are briefly these:—The vessels employed are the usual type of bottom-blown Bessemer converters. These receive the pig iron in the ordinary way, and the blowing is continued until about the time of flame drop, when the vessel is turned down and ferro-silicon (containing from 10 to 12 per cent. of silicon) is added. An after-blow is then made, the time for terminating which varies at the different works. After this, ferro-manganese or spiegel is added to the vessel for recarburising, and the steel is poured into large ladles on cranes, or small hand-ladles, according to the nature of the work. The blowing is generally controlled with the aid of the spectroscope. A mention of the differences in practice may be of interest.

At the works of Eugene Legénisel in Paris, there are two converters, one of 1200 lbs., and one of 600 lbs. capacity. The sprues and heads and all steel scrap are melted with the pig iron in the cupola, and every cupola charge consists, after the first one or two heats, of about 80 per cent. of pig and 20 per cent. of steel scrap. The ferro-silicon and spiegel additions are melted in small and very ingeniously arranged cupolas, and are added to the converter by means of ladles. In blowing, the converter is turned down the first time just short of flame drop, so as to leave enough carbon to act as an index in the spectrum of the after-blow. The silicon in the steel very seldom exceeds 0·05 and often runs down as low as 0·02 per cent. A very large proportion of the small work is cast in green sand.

At the Creuzot works of the Messrs. Schneider there is one 1500 lbs. converter. The steel scrap is added directly to the converter, and the ferro-silicon and the ferro-manganese are heated red, but not melted before using. The spectroscope is used to control the blowing as at Paris; but the vessel is turned down earlier in the after blow, and the aim is to leave 0·20 per cent. of silicon in the steel.

At the works at Hagen, Westphalia, there are two 1200 lbs. converters. The blowing here is continued to the flame drop for the first turning down, and the after blow is regulated more by time and the general appearance of the flame than by the spectroscope. The additions are melted in crucibles and the small work is poured from crucibles.

The Potter and Hollis Foundry Company, Chicago, has had for several months one 1500 lbs. converter in operation, and another is now being added. The steel scrap is added entirely to the cupola mixture and the ferro-silicon and spiegel are added molten. The blowing is controlled practically as at Paris. The most important change in practice is in the blast pressure; on the Continent very high pressures being employed—up to 30 lbs. per square inch—while at Chicago not over 10 lbs. has been used. Melting the additions in crucibles, as at Hagen, and in small cupolas, as at Paris, have been tried. Both ways are satisfactory, and local conditions will determine which is more economical. The pin bottom, as used at Hagen, and also the usual tyre bottom, have been tried; and it is, perhaps, too early to say which gives the better results.

The steel made by this process is satisfactory in every respect. Entirely sound castings are obtained of any size, up to the capacity of the vessel, as well as ingots; and the steel shows high results under physical tests. Carbon, manganese, and silicon are entirely under control; the first two being regulated by the added spiegel and the latter by the blowing. Phosphorus and sulphur depend, of course, on the stock used. Successive heats can be blown with practically identical compositions. At the Chicago plant the composition for the usual run of castings is from 0.25 to 0.30 per cent. carbon, between 0.10 and 0.30 per cent. silicon, and about 0.60 per cent. manganese. Such steel will give, unannealed, 75,000 to 80,000 lbs. tensile strength, with 5 per cent. elongation in 8 inches, and annealed, 70,000 to 75,000 lbs. tensile strength, with 12 per cent. elongation in 8 inches. The experience so often quoted, of obtaining less sound castings as the temperature of the steel rises, is entirely reversed, and it is found that the hotter the steel, the more solid and more satisfactory in every way are the castings.

A word in regard to the silicon in this steel: While it is possible to run the silicon down for regular practice as low as 0·05 per cent., it is found that nothing is gained by doing this, so far as the castings are concerned. By increasing the silicon (even to as high as 0·50 per cent.) the tensile strength is raised very much without appreciably lowering the elongation.

Tests for magnetic permeability have been made with this steel, containing over 0·30 per cent. carbon, and with manganese above 1 per cent., which have given the very best results. While

* A paper read before the American Institute of Mining Engineers.

† *Jour. I. and S. I.*, xliv., 1894, No. 1, p. 97.

it is not the intention of the writer to theorise, it may be remarked that the very high casting temperature, together with the freedom from gas, seems to have resulted in physical conditions in the steel which modified the influence of the chemical constituents, as generally formulated.

The only trial of this process with large vessels that has come to the attention of the writer, consisted in a number of heats blown in 8 ton vessels at *Les Aciéries de France* last summer. Here the object was to obtain soft steel for wire, and the resulting product showed less than 0·02 per cent. of silicon, 0·13 of carbon, and 0·20 of manganese; the physical test running about 50,000 lbs. tensile strength, with 27 per cent. elongation.

While it may be unwise to conjecture uses for this process in advance of actual trials, it seems not improbable that where the increased solidity of the ingots justifies the small additional cost of their manufacture, it will have a future in connection with the operation of large Bessemer plants. It has most certainly demonstrated its value in making steel castings.

To summarise what may be justly claimed for this process up to the present time:—

1. It furnishes a steel foundry with exceedingly fluid, quiet steel in such quantities and at such intervals as are best adapted to the work to be poured.

2. It makes possible the successful casting of small and intricate pieces in steel.

3. Green sand moulds can be used with satisfactory results; the steel being so fluid and holding its temperature so well that it can be poured slowly over a lip, and in this way not tear a green sand mould and not carry in air, as is the case so often when bottom pouring from large ladles is employed. It should be said, however, that when castings have to be machined for a perfect surface, it is better to use dry sand moulds, for with green sand there is an unavoidable "pin-holing" at times in from the surface.

4. The relative small cost of installation, and the fact that a converter can be heated up in an hour ready for use, make it unnecessary to operate the plant continuously in order to obtain economical or satisfactory results.

It should be added that M. Walrand claims the same results in the basic process by substituting a high phosphorus iron for the ferro-silicon addition, but with this the writer has had no experience.

COPPER ORES IN THE PERMIAN OF TEXAS.*

THE existence of copper ores in the Permian measures of Texas has long been known, and these ores have been from time to time the object of geological researches and mining developments. The most important of these efforts was made about 10 years ago by the Grant Belt Copper Company of Texas, but it ended, after several years of fruitless labour, with an entire failure. The ore appears principally in two zones of the Permian rocks—namely, the Red River zone in the counties of Archer, Wichita, Montague, Hardeman, and Wilbarger, and the Brazos River zone in the counties of Haskell, Baylor, Stonewall, and Knox. The above-mentioned company prospected mainly through Hardeman, Haskell, Knox, and Wilbarger Counties.

From information collected by me, it seems that the geological adviser of the company assumed the copper ore (or at least the copper) to be of plutonic origin, and was directing his efforts towards the depths for the mother lodes or deposits. The diamond drill was employed for this purpose, and at one point, in Knox County, a hole was sunk to the depth of 1000 feet. How an engineer could conceive the idea that these copper ores of the bedded Permian, which is bare of all plutonic lodes, dykes, or intersections, must be of eruptive origin, is rather hard to understand. I have been told that indurated water-worn clay, mistaken for volcanic scoria, suggested or supported the hypothesis.

The Permian copper ores appear in several horizons, and there exist two such horizons in each of the above-mentioned zones. In the Red River district, the lower horizon is reported near Belcher, in Montagu County. It belongs to the lowest Permian, and lies not much above the line of contact with the underlying coal measures. The upper horizon of the Red River district is represented in Archer and Wichita Counties, &c. The lower copper horizon of the Brazos River zone appears in the counties of Haskell and Baylor, and the upper horizon in Stoneway County, &c. It should be remembered here that these horizons are not sharply bound to one continuous stratum or to the same level, as will easily be understood from the fact that the stratification of the Permian measures is somewhat irregular and non-persistent, and that the beds change rather abruptly.

Of the above-mentioned zones, that of Archer County, &c., is one of the most developed, and has been considered as one of the most promising territories; and having had occasion to investigate this district on a short trip during last summer, I hereby lay the principal results before the Institute. The face of the country is very level, showing only small differences between the flat land and low hills, and the low bluff (never more than 100 feet high) of the ravines and beds of Wichita River and its branches; the latter being principally the results of erosion during the wet season, while otherwise mostly dry.

The Permian measures consist of comparatively soft sandstones, clay slates, comparatively soft conglomerates and marls. The occurrences of copper ore are scattered over a large area of Archer and Wichita Counties, and the ore of Archer County appears principally in the marls and clay slates as pseudomorph after wood (cuprified branches of trees, to a thickness of several inches in diameter), and as larger or smaller nodules (up to 4 or 6 inches in diameter), most or all of which are of fossiliferous origin. Copper ore is found also in irregular amorphous masses, intermixing with and impregnating the marl or clay slate. In a third form it occurs "as numerous small pebbles in a hardened cupriferous marl conglomerate." And, finally, I found such nodules of copper ore seated in hardened clay slate and even in sandstone.

The copper ore consists principally of green, blue, and dark silicates and carbonates of highly varying percentage. The cuprified wood runs mostly high in copper, generally between 20 and 60 per cent., and the same is true of the nodules. When impregnating or intermixed with the clay and marl, the ore mostly contains less than 20 per cent. of copper; so does the conglomerate, &c. No matter in whatever form the ore appears, it shows always its neptunic origin. The pseudomorphs of wood, as well as the nodule ores, occur in entirely separate and distinct pieces of irregular form, and are scattered irregularly through the clay or marl matrix, forming nests or pockets of uncertain extent and size. The ore occurrences in the conglomerate marl and the cupreous clays all show decided pocket form, and give indisputable evidence of the origin of the copper ores by precipitation during the deposition of the copper-bearing stratum, or by replacement and metamorphosis shortly after the deposition of the strata.

1. *The Isbell Lead.*—The so-called Isbell lead is located about 7 miles north-west of Archer City. The lead consists of a number of scattered copper ore pockets and deposits which have been developed along the escarpment of a low hill and bluff, which follows a pretty uniform direction. The name "lead" may have been derived from the later feature. The ore occurs mostly as pseudomorph after wood or as irregular lumps of the dark and green silicates. It has its seat in a stratum of slightly bituminous clay slate and marl. The ore appears also directly under and closely connected with the cap rock, a sandstone, and small portions of the clay slate and marl are also cupriferous. Of the old tunnels and shafts of the Isbell lead, ore was reported in the Isbell tunnel only; and I observed, after clearing out that tunnel, one small pocket of about 5 lbs. of ore in the right corner of the face, and another smaller one of perhaps 2 lbs., about 8 feet back from the face of the tunnel and directly under or partly in the hanging wall. In the lower part of the face I noticed a pocket of cupriferous clay slate of about 10 to 12 inches in width, 6 to 7 inches in height, and 1 to 6 inches thick. Doubtless several other little pockets along the walls of the tunnel escaped my observation, as the walls had not been entirely refaced. The general dip of the measures is slightly north-west.

2. *The Ball Mine.*—The so-called Ball Mine is from ½ to ¾ mile west-north-west of the Isbell tunnel. The locality lies along the break of an anticlinal, and in the centre are a number of old openings. The ore appears also in a stiff, gray, white to dark bituminous, clay slate or marl as at the Isbell tunnel. The ore consists here principally of nodules and nuggets. A test pit, 3 feet 8 inches in length, 2 feet 6 inches in width, and the same in depth, sunk in the centre on the crest of the anticlinal into the clay slate, produced 8½ lbs. of good ore, and as about one-third of the nuggets and nodules may have escaped my attention, I may safely say that the above-mentioned space of 23 cubic feet produced 10 lbs. of ore, which is not quite ½ lb. to 1 cubic foot.

During a former period of development a trench had been cut across the anticlinal (west-south-west to east-north-east), but not quite to the bottom of the copper-bearing clay slate, which is over 3 feet thick, and I could find nuggets of ore scattered here and there for the whole length of the trench, about 40 feet. I also noticed scattered signs of the ore for about 150 feet in a south-east direction in the clay slate until the same is covered by the sandstone; but my examination of the matrix to the north-west (west-north-west and west-south-west) for over ¼ mile detected no ore. Among the copper-bearing clay slates brought from the test pit I noticed a few fragments of rock, which apparently do not belong in this Permian clay slate, and which may come from older formations. If such an origin was proved, it might be considered as a point in favour of the theory, held by some, that these copper nodules or nuggets are the result of a drift from older formations and a redeposition in the Permian strata. But these rock fragments occur so seldom, and the proofs against the drift theory are so overpowering, that we may dismiss the matter without further consideration.

3. *The Winn Pocket or Deposit.*—This opening is from ¼ to ½ mile south-south-west from the Ball Mine. Here, also, the ore appears in a bed of marl or clay slate capped by sandstone, which has been removed in a canyon along a local anticlinal. Next under the sandstone lies a marl-conglomerate, and below this the ore-bearing stratum which resembles more a marl than a clay slate. Only the gray to dark varieties of the clay slate or marls here, as in the other localities, already mentioned, carry ore, while the red clay slate and clay have no ore. At the Winn locality the reddish matrix forms about 90 per cent. of the marl bed, so that only 10 per cent. of the beds are copper-bearing.

4. *The Elm Spring District.*—Around Elm Spring, which is about ½ mile west from the Winn locality, and about 1½ mile south-west or west-south-west from Isbell tunnel, we have apparently the same horizon of the Permian as at the other localities already described. Elm Spring comes from a clayey marl schist capped by sandstone. The marl schist is a grayish white material at the spring, and changes along the eroded bluff more to a clay slate of gray, white, and reddish colour. But no copper could be detected either in the clay slate or in the marl schist. Some copper ore was collected from a mixed white and dark clay schist opened by some old diggings about ½ mile north-east from the Spring. It is principally nugget ore. And about 2 miles north-west another outcrop of a small pocket appears in a bluish white and dark clay under sandstone. A few copper ore nuggets and pieces of sandstone crustified by green carbonate were observed.

Other Localities near Isbell.—About 2½ miles west of Isbell workings, and about 1 mile north-west of Elm Spring, I obtained the following section along the bluff:—1. Sandstone, lower part slaty, 2 feet. 2. Gray, bituminous clay-slate and marl, seat of the copper ore, 2 feet. 3. Purple sandstone with rounded edges, about 3 feet. 4. Variegated clays, containing siliceous concretions and siderite, about 25 feet. In the *débris*, which covered the flat slopes or sides of the bluff and near the bottom, I found some samples of copper ore which had been washed from above, and must have come from No. 2, although I could detect no ore outcropping in No. 2 along the face of the bluff. No. 2 is the same bituminous clay slate as that observed at the Isbell and Ball.

A short distance north-west from the last section I found the capping sandstone removed from the clay slate for an area of about 300 by 300 feet, by reason of a little anticlinal break in the formation. The break runs north-west to south-east, and the underlying clay slate was considerably weathered and washed, and showed a large number of ore nuggets scattered over this exposed area, and of which about 1-30th to 1-20th was covered with them. It is also possible that this ore continues under the cap rock for some distance. So far as could be seen, the locus of the ore is principally in the upper stratum of the bituminous clay slate, but also to some extent in the lower (slaty) part of the cap rock.

About 1½ mile south-east of this locality, *i.e.*, about ½ mile south-east of Elm Spring, I noticed the following section:—1. Ledge of capping sandstone, about 10 feet.—2. Mixture of conglomerate ore and rounded quartz concretions in clay slate or clay, 25 to 30 feet.—3. Mostly red clay, 25 to 30 feet. Under this came the floor of a little valley, limiting the rock exposure. An examination made for about ½ mile along the bluff detected no copper ore.

Résumé.—The territory examined around the so-called Isbell lead extends about 1½ miles east and 3 miles west of Isbell and about 1½ miles north and 1½ miles south, therefore east and west 4½ miles and north and south about 3 miles. Copper ore was observed in this district in at least 10 different localities, in the forms of pseusomorphs of wood, of nuggets, or nodules, and as cupriferous marl or clay-slate and clay. The ore appears always in irregular pockets of uncertain position in clay slate and marl of highly variable thickness; but this clay-slate, &c., and the whole series of Permian measures enclosing the said clay slate and marl matrix belong undoubtedly in the same geological horizon. In the localities 2 miles south of Archer City we have the copper ore in the clay slate and as cupriferous marl conglomerate, both apparently of the same geological horizon with the deposits around Isbell.

The ore in the Texas Permian has this in common with the ore of the *Kupferschiefer* in the German Permian (Mansfield district), that they both occur principally in a bituminous clay slate and marl; but while the copper ores of the former occur prevailingly as separate pieces, nuggets, and modules, collected or grouped to irregular pockets or deposits, the copper ore of the *Kupferschiefer* is concentrated in one continuous thin layer of that formation. Moreover, the copper ores of the Texas Permian are principally carbonates and silicates or siliceous carbonates; while those of the German Permian are mostly sulphurets, deposited in very fine particles. But somewhat similar conditions must have existed during the process of deposition in both formations.

* Paper read by Mr. E. J. Schmitz, of New York City, before the American Institute of Mining Engineers.

IRON AND STEEL INSTITUTE.—BILBAO MEETING.—In accordance with previous announcements, the autumn meeting of the Iron and Steel Institute will commence, at Bilbao, on Monday, August 31. The following papers have been offered for reading:—1. On "The Spanish Iron Industry," by Don Pablo de Alzola (Bilbao).—2. On "The Estimation of Sulphur in Iron Ores," by R. W. Atkinson, B.Sc., F.I.C., and A. J. Atkinson, F.I.C. (Cardiff).—3. On "The Present Position of the Iron Ore Industries of Biscay and Santander," by William Gill, M.Inst.C.E. (Bilbao).—4. On "A New Water-cooled Hot-blast Valve," by William Colquhoun (Liverpool).—5. On "The Manganese Ore Deposits of Northern Spain," by Jeremiah Head, M.Inst.C.E.—6. On "The Missing Carbon in Steel," by T. W. Hogg (Newburn Steel Works).—7. A note on "The Presence of Fixed Nitrogen in Steel," by F. W. Harbord, Assoc. R.S.M., F.I.C., and T. Twynam.—8. Further notes on "The Walrand Process," by G. J. Snelus, F.R.S., Vice-President.—9. On "The Roasting of Iron Ores with a View to their Magnetic Concentration," by Professor H. Wedding, Bessemer Gold Medallist (Berlin).

A MECHANICAL COKE DRAWER.*

AMONG the new devices for cheapening the cost of material entering into the manufacture of iron is the mechanical drawing of coke, by which the coke from bee-hive ovens is extracted with a minimum of manual labour. About 20 years ago an ordinary plate conveyer was put into use at the plant of bee-hive coke ovens owned by the firm of Bell Brothers and Co., near Middlesborough, England. This conveyer ran close along the front of the ovens, and carried the coke to the cars. The ovens were drawn by hand, and a very great saving in cost was secured, as one man could draw and clean out twice as many ovens after the conveyer was put in use—he having no forking to do, and the coke being carried away as fast as it was drawn to the mouth of the oven. The next step was further to eliminate hand labour as far as possible; and Mr. Thomas Smith, of the Thorncliffe Ironworks, near Sheffield, patented in 1891 the machine for drawing coke which I here describe. This machine, the outcome of several years of experimenting, has now been in successful use since 1891, and there are between 20 and 30 of them in operation at present, and others building.

The machine consists of a wedge-shaped shovel of proper width and thickness, connected with a steel rack of sufficient length to reach the back of the oven. The rack is supported by rolls, and guided by a device operated by a hand wheel, which directs the shovel in the oven. The rack is driven by a pinion on a vertical shaft, carrying a bevel gear on the upper end. This bevel gear is driven by another on the engine shaft. The engine is single cylinder, with reversible gear, and engine and machine are mounted on a truck, which is propelled along the track in front of the oven by a worm and gear, connected by a clutch to the engine shaft. A 9 horse-power boiler, on a separate truck, is coupled to the machine, and gives ample steam both for propelling and operating. In entering the oven, the shovel runs under the coke, and as the shovel is withdrawn, the coke, dropping behind the thick end of the wedge, comes with it. The first of these machines to work in this country was made from English drawings by Messrs. McLanahan and Stone, Hollidaysburg, Pa., and has been in operation for the past month at the plant of the Latrobe Coal Company, Latrobe, Pa. There is also at the same plant an English-built machine, imported from the Thorncliffe Iron Works, which has not yet been put in operation.

The Latrobe plant, consisting of a block of 30 bee-hive ovens, is just finished, and has been in operation for scarcely a month. It cannot furnish a full day's work for one drawer, as there are only 15 ovens to be drawn daily instead of from 30 to 35, which is within the capacity of the machine. A green hand on the extractor is now drawing four 12 feet ovens per hour. Of course, the machine cannot get around the jambs, and take out the last of the coke. This is done by hand, and takes from 5 to 10 minutes per oven. In England, one boy operates the extractor; one man waters; one man levels the ovens and lutes up, and one man rakes out after the extractor, for a plant of 60 ovens. As the ovens of the Latrobe plant are built in double rows, parallel to the railroad, there are two lines of conveyer running to the end of the block, where a cross conveyer running at right angles to the other two, rising at an angle of 1 to 4, takes the coke from them and elevates it to a chute, from which it is drawn into the car, after passing over a screen to remove the braize.

To the question, what effect this mechanical work produces on the coke, I can answer that the extractor does not break it any more than, if as much as, hand drawing; but there is some breakage in the screen; and in looking at a car of screened coke, the fine is seen on the top, while the coarse pieces run to the sides. The coke, once on the conveyer, does not move until it reaches the end and drops on to the cross conveyer.

These conveyers on each side of the block are 238 feet long, and the end conveyer is 110 feet. They travel at a rate of 50 feet per minute and take 12 horse-power to run them when loaded. As regards the expense of operating, the same number of men will operate the extractor and conveyer and draw the ovens, but the cost will vary with the wages of different localities. The following men are required:—One man at the conveyer engine (unless it were run by central power plant), who could operate several conveyers and attend to oiling, &c.; one man to water the coke; one man to run the extractor; one man to rake out; and one man to lute up and level. This number of men is employed at several plants now operating in England.

These extractors can be used without the conveyer, if desired; and the changes to be made in old ovens are simply to widen the oven doors and then to lay a track in front of the ovens. It may be of interest to know what wages are paid for drawing ovens in England in the Yorkshire district. For hand-drawing they pay 45 cents per oven. This includes watering, levelling, drawing, and loading on cars. The per diem wages for drawing with the extractor are $1 for engineer, 62½ cents for the extractor runner, and 75 cents for the man who waters; 5 cents per oven is paid for cleaning out after the extractor and 7 cents for levelling, or a total of 19·9 cents per oven, against 45 cents for hand-drawing.

* A paper read by Mr. Robert A. Cook, of New Brunswick, before the American Institute of Mining Engineers.

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A YEAR'S MINING IN NEW SOUTH WALES.

THERE is always a danger that the meteoric brilliancy with which the prospects of Western Australia have flashed upon the mining horizon may obscure the merits of some of her sister colonies. This would be as absurd as unjust, but then absurdity and injustice are not unknown in this world, not even amongst mining investors, though they, of all men, might reflect that the rules of the Stock Exchange are applicable in a wider sense than was ever intended by their promulgators, and that advertisement on an exceedingly large scale is anything but evidence of the advertiser having attained to a position of undoubted financial security. It is only concerns, be they firms or colonies, of assured soundness and proved prospects that can afford to dispense with the services of the trumpeter. Amongst such the colony of New South Wales is but rarely heard of in this metropolis, and it is fortunate that the annual report of the Department of Mines comes to remind us each year of the steady substantial mining work that is being done so quietly and unostentatiously.

This report serves to show what thorough solid progress is being made in mining matters throughout the colony, and the substantial character of this improvement is made perhaps the more evident by the, in one respect, unfavourable result of the year's work. The total value of the year's mineral output was, according to this report, four and a half millions sterling for the year 1895, as against five millions sterling for the year 1894, so that a net decrease in the value of the minerals produced of no less than half a million of pounds sterling is the result of the year's work. This decrease, however, needs some looking into and investigation before its meaning can be understood. When it is, we venture to assert that it will not be looked upon as in any sense a bad augury for the future of the mining industry in New South Wales, but very much the reverse. In the first place, let us note that there are increases in the values of certain items to the extent of some £275,000, whilst the total decreases in other items amount to rather over £775,000; the difference being, of course, the net loss of £500,000. Now, the mineral production of New South Wales differs from that of the other leading mining colonies of Australasia in that gold, though always an important item, is not the chief—this place being occupied by silver and the accessories produced in silver mining, such as lead, for instance. There are three minerals which play the prominent parts in the mineral production of this colony—namely, silver, gold, and coal, the total value of these three items aggregating nine-tenths of the value of the entire mineral output. These three must, therefore, be examined somewhat in detail, and we note immediately that whilst gold shows a large increase in value, the bulk of the decrease—say, over five-sixths of it—is due to the decrease in the value of the silver production, whilst the value of the coal output also shows a fall.

The gold question is a comparatively simple one; we are here dealing with the standard of value, which is, therefore, exempt from fluctuations, except, indeed, the very trifling ones that may be due to variation in the fineness of the gold produced, and which variation, if it exists at all, is quite insignificant. We have, therefore, to do with quantities only, and we find that the gold outputs of the two last years are as follows:—

1894 ..	324,788 ounces,	worth	£1,156,717
1895 ..	360,165 „	„	£1,315,929
Gain in 1895 ..	35,377 „	„	£159,212

This substantial increase is stated in the report to be due to the large numbers of unemployed men who have been sent, under Government arrangements, to the gold fields, to earn a living for themselves, chiefly as fossickers on alluvial fields.

It seems that the total number of miners employed was 21,434, being an increase of 4,227 over the number employed in 1894. As nearly as possible half the men employed seem to have been engaged in quartz mining, and half in alluvial. Under these circumstances we should expect the reef gold to form by far the larger portion of the production, because alluvial mining requires a very small and sometimes quite insignificant capital outlay compared to that required for extracting the gold from quartz reefs, and we find accordingly that as far as returns have been received—namely, for 318,000 ounces—72,000 ounces were from alluvial and 246,000 from reef gold. We may expect that of the amount not returned the larger proportion is alluvial, and may hence estimate the alluvial produced as one-fourth and the reef gold as three-fourths of the total. This is a very gratifying state of affairs, because alluvial deposits, being from their nature more rapidly exhausted than quartz reefs, we are justified in looking upon reef mining as the more likely to prove a permanent industry. A curious feature of the year's work, and one more difficult to understand, is the enormous increase in the value of the quartz crushed. Thus, in 1894, returns were obtained of the crushing of 149,514 tons, which yielded at the rate of 14 dwts. 8 grains to the ton; in 1895, 128,431 tons have yielded at the rate of no less than 1 ounce, 7 dwts., 1 grain, or not very much less than double the previous year's yield. It has been greatly helped by the wonderful results obtained in the Bathurst district, where 17,541 tons gave no less a yield than 4 ounces, 15 dwts., 7 grains to the ton. So wonderful a yield upon such a very substantial quantity of stone is something quite phenomenal, and deserves to be put on record, for it has but rarely, if ever, been excelled. We wonder how many mining men in England know of this extraordinary year's work, and how many would have remained in ignorance of it had it occurred in Western Australia, instead of in New South Wales. It is, perhaps, too much to hope that such magnificent returns will be kept up, but when we note that the total output for 1895 is double that of 1893, and is the highest since 1873, there is every reason to hope that future returns will not be far below the 1895 output, even though the improvement is hardly likely to continue at the same rate.

Turning next to silver mining, we find that the production of silver-lead, in which form the greater part of the output leaves the colony, was as follows in the last two years:—

1894 ..	180,327 tons, worth	£2,195,339
1895 ..	219,881 „ „	£1,560,813
Increase in 1895 ..	39,554 „	
Decrease in 1895 ..	.. .. ..	£634,326

We now see that the large decrease that we have had to note in the value of the mineral output does not by any means imply any falling off in the mining activity of the colony, or we might almost say of the Broken Hill district, for practically the whole of this silver production comes from a comparatively small area. It is stated that the output would have been far more considerable than it actually was had it not been for the disastrous fire in the mines of the Broken Hill Proprietary Company (Limited), which threw a large number of men out of employment, and caused a very serious, though fortunately only temporary, disarrangement of mining work. Of course, the difficulties in the treatment of the sulphide ores that have been met with in the lower levels of the mines of this district have retarded its development. It is, however, stated in the report before us that these difficulties have now been successfully overcome, and that in consequence a number of the smaller mines which had been compelled to close down, now intend to recommence operations, and hope to be able to work at a profit.

Everything, therefore, points to a large further increase in the volume of the output in the coming year. But in 1895 the output increased just about 22 per cent. over 1894, whilst the prices realised fell off just about 29 per cent. as compared with that year; in other words, the price per ton of the product was not two-thirds in 1895 of what it was in 1894. Now, we cannot expect the price of either silver or lead to be raised by such an increase in the output as we seem warranted in expecting. On the other hand, there is a pretty strong impression in a good many quarters that silver has touched bottom, and, in fact, the 1895 prices were not, on the whole, the lowest that have been obtained. No one on this side of the Atlantic can pretend to say what the result of the present display of wirepulling in the United States is going to be; it is, however, clear enough that the pulling is being done with silver wire, and that the ultimate outcome is expected to be a rise in the value of that metal. If so, if the quantity of the output and the value of the product rise simultaneously, there should be good times in store for the Barrier Range, even though lead would be almost necessarily depreciated. On the other hand, the district is quite likely to become a large zinc producer, and this would add to the revenue obtained from what we have called the accessory products of silver mining. The effect of this on the zinc market cannot well be estimated, but if even a small percentage only of that metal is recovered, the influence of a district raising between one-half and three-quarters of a million of tons of ore in the year cannot but make itself felt.

With regard to the third mineral we have mentioned—namely, coal—the position is somewhat the same as in the case of silver. The production has increased, though the value has fallen, as the subjoined figures show:—

1894	3,672,076 tons,	worth	£1,155,573
1895	3,738,589 ,,	,,	£1,095,327
Increase in 1895	66,513 ,,		
Decrease in 1895			£60,246

The amount of the output is a decidedly satisfactory one, and is one of the largest yet recorded in the history of the colony, whilst the price, 5s. 10·3d. per ton, is the lowest hitherto touched. In both these facts we see a happy augury for the future of New South Wales. It goes without saying that colliery owners would like to get a high price for their coal, and that they by no means appreciate the low value put on their product; but, on the other hand, it is just as certain that cheap coal will be a more potent factor in developing the entire colony than anything else could be. At the same time, the increase in production seems to show that the price is not too low, and that masters and men can make a fair living at it. Of course, the elements of low price and large output re-act on each other in a subtle and complicated manner. When the price of coal is low, industries that depend absolutely, as so many do, upon cheap fuel, spring up in all directions, and the demand for coal increases with proportionate rapidity. On the other hand, the larger the output of coal, the more cheaply can the mineral be produced, so that the profit earned by the coalowner is greater in proportion. Of course, these movements cannot come about instantaneously; when coal is getting cheap and is being produced in increasing quantities, it takes some time before industrial developments can adjust themselves to this condition of things, and during that time the position of the coal trade is not likely to be an agreeable one. But as over-production in the coal trade, in the sense of producing more coal than the country is capable of absorbing, is a rare condition anywhere, and above all in a progressive colony, affairs are sure to right themselves.

There are a few indications that enable us to guage the degree of technical perfection to which the New South Wales coal miners have attained. We find, for instance, that the total number of men employed above and below ground at these collieries was 9022 in 1895. This gives an average of 414·4 tons of coal raised per head. In England in 1894, the last year for which, we are ashamed to say, full information is as yet available, there were only 277 tons for each person similarly employed, or, in other words, the New South Wales coal miner turns out half as much coal again in the year as does his fellow worker in the old country.

As regards accidents, again, a very good test of the efficiency of colliery management, we find that the death rate by accident per 1000 persons employed in New South Wales was 1·108, whilst the number of deaths per million tons of coal raised was 2·67. In England these figures were respectively 1·597 and 5·776, in both of which the Australian colony has a very well marked advantage. These few data seem to show pretty conclusively that coal mining in New South Wales stands on a sound basis, and when this industry is in a healthy and progressive condition, it is quite safe to argue that the general prosperity of the colony, and especially of its mining interests, is fairly well assured.

TREATMENT OF SLIMES AT THE CROWN REEF.

NO one can contemplate the future of the great gold mining industry of South Africa without a pleasurable feeling that a period of unique prosperity is awaiting it. The sudden and great troubles which it has recently encountered, and which threatened to do it serious injury, have, we think, been now overcome, and it is not too much to say that great benefit is likely to result from them. But ignoring other questions, and confining ourselves exclusively to the gold mining industry and its future, we cannot but think that it is destined to achieve great things. When one reflects upon the prosperity attending individual companies, and the wonderful progress they have made in a comparatively short period of time, together with the magnificent prospects of the majority of them, it is only natural to expect that an exceptional career is in store for them. Our readers are well aware that the success of the Rand does not depend upon great outputs, running many ounces to the ton. On the contrary, the yield per ton is small, only running into pennyweights, but it is other factors, together with the facilities for economical working, which enable great profits to be made. All are aware of the great success attending the introduction of the cyanide progress, which certainly revolutionised gold mining in South Africa. Now, however, there is every likelihood that the profits of individual companies will be augmented by the treatment of slimes, which has already been attended with complete success at the Robinson Mine. Hitherto, as is well known, slimes have been looked upon as waste; in the future they will have to be reckoned with in the company's monthly outputs. As a matter of fact, their treatment alone is likely to revolutionise the fortunes of a great many concerns who are energetically struggling to make ends meet, and the product of the slimes will, in all probability, give the margin of profit. The treatment of these slimes is naturally exciting great interest, and the result of the experiments of the Crown Reef Company is awaited with keen anxiety. The plant, which has been designed by Mr. WILLIAMS, is for treating the slimes as they come direct from the mill. It is fitted up on a most elaborate scale, the cost of which will approach to £15,000, so it is evident that the officials are pretty sanguine of success. The plant is described in detail by our contemporary, *The South African Financial Record*, as follows:—"The entire plant consists of three masonry settling pits, shaped like inverted cones, five iron cyaniding tanks, four pumps, and four Siemens-Halske precipitating boxes. The mill pulp, after passing in the ordinary way through spitzkasten, and after separation of the tailings, passes through a special series of spitzluten, which remove the last portions of extremely fine sand carried over with the slimes. On leaving this the current carrying the slimes receives, from a perforated overhead launder, a continuous low stream of a solution of lime, with which it is thoroughly mixed as it flows towards and into the settling pits. Here the lime effects the rapid subsidence of the slimes, the liquid leaving the third pit being practically clear and free from slime. The settled slimes in the pits form a sludgy mass, which is pumped into the cyanide tanks, one-half of the requisite amount of cyanide solution being introduced into the tanks before charging with sludge, and one half after. The bottoms of these tanks slope from the sides towards the centre, where a pump pipe projects into the tank. Another pipe enters the tank at the side close to the bottom, and a constant circulation of the thin muddy mass is thus kept up, a pump being kept at work withdrawing it from the central pipe and injecting it back into the tank through the side pipe. The whole mass of the slime is thus kept in suspension, and in intimate contact with the cyanide solution for two to three hours, when the circulation is arrested, and the mass allowed to subside. Settlement takes place with great rapidity, and when judged complete, the supernatant liquid is withdrawn through a series of pipes arranged at intervals down the sides of the tank. A second so-called weak wash is then introduced, and the circulation resumed for a short time. The mass is then again allowed to subside, the liquid withdrawn, and the residual sludge run out through the central pipe and conducted to a dumping site. About 50 tons of slimes constitute an ordinary charge, and about 200 of cyanide solution of 0·01 per cent. strength are used in the operation. A number of improvements of the well-known Siemens-Halske plant have been introduced by Mr. WILLIAMS into the precipitation part of the process. The boxes, for instance, are much shallower than usual, being 30 feet long, 6 feet wide, and only 4 feet deep. Each box contains 13 longitudinal iron plates, separated by lead frames, each of the latter carrying 16 sheets of leadfoil cut into ribbons. This is found more effective than the original lead plates or the lead shavings subsequently employed." The plant is capable of treating the entire slimes produced by the mill, amounting to about 5000 tons per month, and it is expected that it will increase the monthly profits by £2000, or £24,000 per annum. As this is equivalent to 20 per cent. on the capital of the company, it will be perceived at a glance what an important matter the successful treatment of the slimes will be.

GOLD IN NEVADA.

ONE of the features of the general progress of the gold mining industry is the metamorphosis of silver fields to gold fields, a change which is not confined to any one quarter of the globe. One of the latest evidences of this is the abundant discovery of gold in Nevada, which is known all the world over as a great silver producer. It is true that the famous Comstock has always been regarded as a great silver lode, but, as a matter of fact, it has always been a prolific gold producer, the *Mining and Scientific Press* pointing out that it has yielded not less than $150,000,000 of this precious metal. Even the silver-lead ores of Central Nevada carry a large percentage of gold. At Silver City, 5 miles south of the bonanza mines of the Comstock, are gold mines that have been worked nearly 40 years, whilst at Pine Grove are gold veins that have been in operation for 30 years. In fact, most of her gold mines are doing well, the characteristic of the veins being permanence and persistence in depth. Two or three weeks ago we had occasion to speak of the progress of the gold mining industry of Utah, and of its promise to assume colossal proportions in the future. It is significant that the great gold belts and the big mines of Nevada lie well to the east towards the west line of Utah. The De Lamar seems destined to become a great gold producer, its gold belt covering many miles of territory. Indeed, this mine has been yielding about $100,000 per month, to be considerably augmented with increased milling capacity. The company regularly runs a special bullion coach, accompanied by armed guards, from the mine to the railroad at Milford. The lode is opened up by 10 tunnels, in all of which ore is in sight. One of the keenest rivals of the De Lamar is the April Fool Mine, which is also doing exceedingly well. Last winter a new and very promising district was discovered, called the State Line Mining District, the mines of which lie partly in Utah and partly in Nevada. According to our contemporary, some of the mines are rich in silver, besides carrying a paying amount of gold. In the district there are really two mineral belts—one gold and the other silver-bearing. The gold veins are in a formation of granite and quartzite, and the silver in porphyry. The two belts lie parallel and only about a mile apart. Of course, the metals in the veins are more or less mixed in places, but in addition to whatever silver they carry, all the mines show well in gold. In Eastern Nevada, along near the Utah line, are several big gold belts. At Osceola there is an auriferous belt containing both quartz veins and placers. A little back from this border section, in Nye County, lies Montgomery district, and near it several other districts, all containing prospects, and justly promise to be rich mines. Thus Nevada appears to offer an excellent field for the seekers of good properties, as well as for the attentions of experts and miners.

GOOD NEWS FROM SOUTH AFRICA.

IT was only last week, in these columns, that we quoted the sanguine opinion of Mr. BARNATO upon the future of the gold mining industry of the Rand. "The mining organisation," he said, "is now restored, and record returns will shortly again become the rule." Within the short space of two or three days the latter portion of his prediction has been amply realised, thus giving evidence that Mr. BARNATO is a sound judge of the present position of affairs in the Transvaal. During the week we have received the gratifying announcement of a record Rand yield, and as this desirable result has succeeded so quickly the termination of the political troubles which have caused us such grave anxiety, and as it is co-existent with the granting of necessary reforms by the Volksraad, we may look upon it as a happy and sure augury of rapid progress and persistent prosperity of the industry in which we all take so deep an interest. Neither is the pleasurable announcement unaccompanied by other welcome news, for which we have the greatest reason to be thankful. There is every appearance of the early cessation of the rebellion in Rhodesia, and now that peace is likely to be once more restored we can leisurely and calmly watch and await the results of development in a country which has raised the greatest hopes in those who are intimately acquainted with it, and who know it to possess a vast deal of that precious metal which only awaits skill and economy to extract it with profit. As to the richness of Rhodesia, indeed, there can be no doubt, for its gold-bearing capabilities have been attested by quite a number of reliable and reputed experts, and now that the supremacy of the Chartered Company has once more, it may be hoped, become established, the internal development of the country ought not to be very much longer delayed. The long-awaited prosperity of Rhodesia—that future which has received the encomiums of both statesmen and miners—will at length have commenced. Mr. CECIL RHODES recently gave utterance to a characteristically worded expression of his views in this regard, from which it appears that he looks forward to a time when Rhodesia will be the abode of quite a large number of sturdy colonists—enterprising, loyal, and industrious. By that time, he believes, the British South African Company, as a corporation exercising Governmental functions, will have ceased to exist—for, as he says, the English speaking people have that in them which makes it impossible to submit indefinitely to the well-meaning, if rather irritating, domination of a paternal Government—and will have commenced the less glorious, but, perhaps, more profitable career of a parent and land-owning company. Before its office of Government has become a thing of the past, however, the Chartered Company will have substantiated many claims upon the gratitude of the English nation by its services in the province of colonisation, for there is no doubt that if it were not for the railways, roads, mines, and public works generally, which the company have put into a fair way of completion, the development of Rhodesia might be indefinitely retarded. There is too great a disposition among members of the little England party to forget these services, and to cavil at the Chartered Company, as, indeed, they would have done in an earlier age at the East Indian Company, notwithstanding that in a large sense it laid the foundation of our Indian Empire. Mr. RHODES, moreover, set himself out to forecast what the political future of Rhodesia will be when it has been more completely colonised and more effectually opened up. On the idea that it is destined to become a mere appanage of the Cape, he delivers himself with great force and emphasis. Such a proposal he refers to the vaunting ambition of certain Cape politicians, which is not to be taken seriously. Nor is he less decided, if more contemptuous, in repudiating the possibility of annexation to the Transvaal. Its internal resources, according to the statesman after whom it was christened, ensure that it will become a prosperous country, and befit it to take an honourable place among the various States of South Africa.

LONDON AND WEST AUSTRALIAN INVESTMENT COMPANY.

SHAREHOLDERS in the London and West Australian Investment Company—and especially those of them who came in upon the original footing—have certainly every reason to be satisfied with the statement regarding their affairs submitted at the recent annual meeting. Altogether the year's distribution will amount to 25 per cent., so that the company has a right to claim inclusion with the group of remarkably successful West Australian companies whose achievements in the direction of company flotation, share underwriting and investments place them well upon the West Australian list. The balance-sheet laid before the meeting may be taken as a very fair representation of the value of the company's assets, since it has been authoritatively stated that, in their computation, all shares which had fallen, since their purchase, below cost price, had been entered at the current quotations; while, on the other hand, shares which had risen were only valued at the original cost, thus in any case, providing that, while the company's actual position might

very well be underrated, it certainly should not be represented as being one pound better than actually was the case. In addition to this, a substantial reserve fund has been accumulated, while a by no means insignificant amount has been carried forward to future account. So stringent and conservative a method of company finance will probably recommend itself strongly to the shareholders, while it undoubtedly ensures that the company's future career shall not in any way be prejudiced in favour of the present. Mr. C. A. Moreing, the Chairman of the company, favoured the meeting with some observations respecting West Australian mining generally, which, while it would probably be judicious, in view of their optimistic tone, to strike something from them, had, at least, the merit of having been originated by one whose knowledge of mining is quite beyond question. The fact that Mr. Moreing candidly acknowledges the existence of a water difficulty is a proof that he is by no means disposed to ignore the difficulties which every one engaged in West Australian mining has necessarily to contend against. But he hastens to add consolation by asserting "after two years' experience in experimenting with dry processes, that the dry process, or what is called a dry process of treating ores, is a most remarkable success," and further that, in his opinion, "it is not at all unlikely that in many mines where there is no lack of water, the dry process will be preferably used to the ordinary wet process, as now applied, and for this reason, that by the dry processes much more favourable extraction of gold can be obtained." The qualifying phrase "so-called" may be thought to stamp the process in question as one that does not remove the necessity of using water, but only limits the amount. Even with this qualification, however, it is, perhaps, going rather far to assert of this new departure that it has been sufficiently tested by actual use upon a commercial scale to place its possibilities of successful working completely beyond the region of doubt. At a later period in his remarks Mr. Moreing laid himself out to show that what was called the dry process was in reality one in which only a smaller quantity of water was used than in the others; and this qualification must be borne in mind when the remarks in question are being considered. Making all due allowances for the probable use of optimistic glasses in looking at this question, it must be admitted that it is a good sign when so experienced an authority as Mr. C. A. Moreing speaks thus hopefully of West Australian mining.

TRADE IN JULY.

The Board of Trade Returns for the month of July, although a slight falling off is shown, need not be looked upon as, on the whole, unsatisfactory. Though there has been a decline in the imports, there has been an increase in the exports, though both are of moderate dimensions. In the former the shrinkage amounts to £714,664, or 2 per cent., whilst the improvement in the latter is £775,299, or 3·7 per cent. In making the comparison, we must bear in mind that the standard becomes a higher one as the year advances, seeing that the revival which took place in 1895 commenced really in the closing months of the summer. We can certainly congratulate ourselves upon the improvement which has manifested itself since the beginning of the present year, the imports being £12,049,421 larger on balance, and the exports £13,660,505, or 10·8 per cent The chief cause of the decline in the imports for the month has been due chiefly to the diminished arrivals of corn, mainly from Russia. The metals, as we have said, are far more satisfactory, and it is pleasing to note that the most conspicuous increase has been in metals—viz., £393,618, and especially iron and steel, which have advanced 16 per cent. in volume and nearly 22 per cent. in value. The total exports of iron and steel during the month amounted to 326,991 tons, as compared with 280,762 tons in July of last year. The value for last month is given as £2,213,696. The seven months' exports amounted to 1,999,211 tons, an increase of 27 per cent. over the corresponding period in last year, while the value thereof was £13,800,050, an increase of 30 per cent. The largest increase both for the month and the seven months has been in railroad iron, which shows an increase of 88 per cent. in quality and 112 per cent. in value for the month, and 84 per cent. in quantity and 99 per cent. in value for the seven months. The largest increase was with China, followed by the British East Indies, British Possessions in South Africa, the Argentine Republic, Australasia, Egypt, Japan, and Chili. In bar and angle iron the increase in the month's exports amounted to 1255 tons, while in value it was 20·7 per cent., and 31·8 per cent. for the seven months. Wire shows an increase in the value of the month's exports of nearly 30 per cent., and 23 per cent. for the seven months. In telegraphic wire, which always shows considerable fluctuation, there was a falling off of 35 per cent. for the month, but an increase of 28 per cent. for the seven months. Cast and wrought iron shows an increase of 18 per cent for the month, and 29 per cent. for the seven months. There was also a satisfactory increase in unwrought steel and galvanised sheets, but a falling off in tinplates and unwrought iron. There has also been a decline in the copper exports, amounting to 17,493 cwts. in quantity, and £16,856 in value, though the returns for the seven months show an increase of 4,556 cwts., and £180,668 in value.

Messrs. John Stevenson and Cowper's Weekly Report:—There is nothing in *excelsis* about pig iron, the warrant market being more suggestive of dotage than stability. True, prices are a shade over last week's quotations, with the exception of Scotch, but these halfpenny waves of improvement are only temporary, and may be stilled by a fall of a whole copper to-morrow. Scotch keeps up its position 3s. over Cleveland, which it has held long enough to be regarded as the new normal difference. The Board of Trade Returns are a good showing as to exports of metals and machinery in July, and over the seven months all sorts of iron and steel compare favourably with previous two years, tin-plates, heavy plates, hoops, and black sheets excepted. Coals and coke also exceed exports for 1894 and 1895. Middlesbrough G.M.B. No. 3 is 36s. 9d., No. 1 38s., and Foundry 4 38s. 3d. Bessemer hematite is 45s. net cash. Shipments from Cleveland have gone up and average 4029 tons a day, which is a little above last month's exports. Finished steel is unaltered, plates being £5 and angles £4 17s. 6d., less 2½ per cent. There is a better demand for iron, and advanced prices are being realised. Spanish ore is a fixture at 12s. 9d. c.i.f., Tees. Coke maintains its price of 12s. 3d. for medium quality at furnaces. Coal is no better. The Glasgow market closed this afternoon—"firmer, fair business." Scotch 45s. 8½d., Cleveland 36s. 7d., Cumberland hematite 49s. 6½d., and Middlesbrough hematite 44s. 2½d. cash sellers.—Middlesbrough and 5, Quayside, Newcastle-on-Tyne, August 13.

THE MINING MARKET.

Friday Evening.

Modest recovery.—Better under-current.—Record crushings.—The Settlement causes West Australians to become dull.

THERE has been nothing sensational about the proceedings of the week now closing, nor has there been any perceptible increase in business. In these respects, the present time affords a striking contrast to the corresponding period of last year, when everyone concerned found it next to impossible to get away for a short holiday, but if recreation and not business, is now characteristic, the position is to-day far healthier, and it is possible to operate with greater safety than during the boom as it existed in August, 1895. The settlement which commenced on Tuesday was concluded without anything worse than one small failure, whose liabilities are within four figures, but though the account was of the smallest dimensions imaginable, not a few of the dealers have been badly bit over the collapse in American railroads, and, allowing for exaggeration, it is quite likely that the amount of money thus transferred is considerable. However, as the "freezing-out" process seems to have been concluded, better times are probably ahead for the Mining Market, and especially South African descriptions, which, as the leading houses have begun to pose as buyers, are in short supply. The conditions upon the Rand have, moreover, so sensibly improved that the July crushings constituted a veritable record, exceeding by 300 ounces the previous best of about 203,500 ounces, while the Transvaal Government has already begun in earnest to ameliorate the admitted grievances of the Uitlanders, besides prohibiting the drink traffic among the native population, which will prove of incalculable benefit in the mines. It is doubtful, however, despite these favourable considerations, if the market will become active just yet, and investors must not be too rash in their operations, for it is also possible that the upward movement, when it does start, may prove short-lived.

Preparations for the settlement, caused South Africans to show weakness on Saturday, when Anglo-French Exploration fell to 4⅛ upon the Board's suggestion to double the capital. Chartered shares were no better than 2 1/16. African Estates dropped to 1⅝, but among Australians, Lake View South rose to 3. Heaviness continued on Monday, aggravated by the unpropitious weather, but rates of continuation were fairly easy, De Beers being carried over at 1s., against 2s. in July. Gold Fields Deferred at 3 or 4 per cent., instead of 7 per cent., and Chartereds at 1½d. per share, compared with 3d. The average charge to carry over was perhaps 5 to 8 per cent., and up to 15 and 20 per cent. was required in the Australian markets, nor were accommodation facilities too plentiful. The "making-up" prices were, in the majority of cases, lower than at the preceding settlement for South Africans, Consolidated Gold Fields Deferred losing just £1, De Beers ¾, East Rands 1 1/16, Robinson Bank ¾, and Knight's, Midas, Jagersfontein, Nourse Deep, Robinson Deep, and Treasury ½. Anglo-French Exploration showed a loss of nearly ½, and African Estates, Chartered, Geldenhuis Estate, and Lydenburg Mining were down ⅛. Crown Reef, Angelo, Matabele Gold Reefs, Research and Development, South African Gold Trust, and Kauri Freehold shares were ¼ down on the account. Any improvement was represented almost exclusively in West Australians, the greatest rise being shown in Ivanhoe, which were up 2. Hannan's Brownhill gained 1⅜, Great Boulder Perseverance 1, Lake View South ⅜, Associated Gold Mines and Great Boulder ⅝, Golden Horseshoe 7/16, London and Globe Finance, Champion Reef, and Mysore 1/16, West Australian Exploring and Finance 7s., Waihi Silverton ⅝, and London and West Australian Investment, Crown United, Norseman, Lady Loch, Hannan's Reward, and Cue "1" each, about ¼. A better feeling as well as higher quotations were exhibited among South African ventures on the next day, and Australians followed the upward movement. There was no particular buying to stir prices, which were mainly influenced by the healthy condition of speculators and the magnificent figures of the Witwatersrand output, which, as stated elsewhere, reached nearly 204,000 ounces against about 193,000 for the June month. Chartered shares touched 3 on influential buying, but on Wednesday, whilst there was a fair quantity of business, with a prominent firm bidding openly, the highest quotations were not retained for Transvaal descriptions. Colonials were rather dull, and Rio Tinto were offered, falling about 10s. to nearly 22. Almost stagnant on Thursday, Kaffirs nevertheless closed firm, De Beers being in demand, and East Rands and Chartereds were strong after official hours, but Miscellaneous mines were only steady. Some reaction occurring in "Kangaroos." To-day the latter was virtually without feature, while South African properties closed at a decided improvement, as East Rand, Goldfields Deferred, Gold Trust, Rand Mines, and Chartered were in demand for good quarters.

South Africans.

The Settlement has taken place without developing any latent trouble other than a weak bull account in African Estates, and the anticipations of difficulties consequent on the fall in Yankees not having been realised, quotations have improved slightly, "specialties," as usual, leading the market. For good Rand shares there has been some enquiry, and Transvaal affairs in general are regarded in a more hopeful light. East Rands have been the medium of, perhaps, the largest business. Those which were quoted last week at 6⅝ changed hands to-day at 7½, and the subsidiary undertakings have closed a fraction better upon balance. In the Deep Levels, Rand Mines remained firm at 29½. Nourse Deep show a slight improvement at 5½. Consolidated Deep Levels have regained their loss of last week, and stand as they did before at 5½. Geldenhuis Deep have risen to 5½, on receipt of the news of a favourable crushing of over 5000 ounces, but we notice a slight decline in Comet at 2½. There has been no alteration in the price of Champ d'Or Deep and Roodepoort. Pioneer have been firmer at 9½. The Barnato stocks, on the dividend lately declared, have moved unequally but are firmer. George Goch, New Primrose, and Kimberley Roodepoort remaining almost unchanged, the two latter not sustaining the upward tendency they showed last week. Barney Consols are a trifle down at 2 1/16, "Banks" are 2 1/16, and May Consols have suffered to the same extent at 2 1/16. Croesus New have gained 1/16 at 1 7/16, Langlaagte Royal ⅛ at 1⅞, Rietfontein ¼ at 3 1/16. Spes Bona have declined ⅛ from last week at 1½. In the Robinson stocks we note an upward tendency, the chief movements have been in Langlaagte Estate and Randfontein the former being ⅛ up at 5½, and the latter 1/16 at 2⅛. Block B at 1¼ and Robinson Banks at 6 are without alteration. Robinson Gold rose to nearly 9, upon that company's record of over 20,000 ounces for last month. In the Eckstein group there has been a very general improvement, Heriot being the solitary exception, which closed ⅛ worse at 9½. City and Suburban are ⅛ up at 4½, Ferreira ⅛ at 21½, Henry Nourse ¼ to 6⅛, Jubilee ⅛ at 9½, Jumpers ⅛ to 6⅝. Modders ⅛ to 6½, on the return of 3150 ounces as compared with 2778 ounces for June. Nigel ¼ to 3⅜, and Simmer and Jack ¼ to 5⅝. Wemmers remain unmoved, and Knight's in which there is a freer market than in many of the former favourites, are ⅛ better at 6 7/16. Meyer and Charlton recovered to 5⅜, Afrikander are ⅛ better at 1 1/16, Aurora have regained lost ground, and are now at 1⅜. Crown Reefs have risen ¼ at 11½, Kleinfontein ⅛ at 3½, Luipaards Vlei are the fraction lower at 2 1/16, and Minerva are ⅛ better at 1½. Little business has been done in Durban Roodepoort, which has not altered, and Sheba hardened to 2⅛, Stanhope being 1½, Steyn Estate 1⅛, Taiti Concessions 1⅛, all show a rise of ⅛. Wolhuter at 6⅝, and Van Ryn at 4⅛, are each ⅛ up. In the Land Department an increased demand arose latterly for African Estates; a new scheme was expected, which, it was hoped, would deal with the reserve shares more favourably than the old one. There was also some French buying, and, as a result, the market price was put up, the final quotation of 1⅛ showing 1/16 rise. Chartereds at 3⅞ show a rise of ⅛, due to the improved outlook in Rhodesia. Consolidated Gold Fields recovered to 12⅜, a gain of ⅛, and South African Gold Trusts were in demand, closing ¼ higher at 7⅞ to 8. Mashonaland Agency at 2⅛ have risen ⅛, Willoughby Consols 1/16 at 1 1/16, Bechuanalands 1 1/16, Alexandra 1/16, Anglo-French 4⅛, and Austral African 1 1/16 lost the turn closing ⅛ down. Diamond shares have been much neglected, St. Augustine at 9s., and Jagersfontein at 10½, showing a slight decline. In the Lydenburg Group, Lydenburg Mining rose to 7. Balkis Eersterling have improved to 1s. 6d. and Barrett 6d. to 13s. 6d. No movement is reported in Spitzkop and the other members of this group.

West Australians.

This market has been steady, but prices have not been at their best, still at one time there was a fair demand. The chief feature has been the improvement in Lake View properties on the news that the Ivanhoe lode had been struck, and that a sample assayed 2 ounces 4 dwts. to the ton. Great Boulder at 7 1/16, and Hampton Plains at 4 1/16 have each lost ⅛. Hannan's Brownhill are down at 6⅛ to a like extent. Lady Shenton have fallen 1/16 to 2⅛, in face of a cablegram stating that 10 tons had yielded 138 ounces in No. 3 level. Hannan's North at 1½, and Oroya at 1⅛ show an improvement on the week, though the latter has had a higher quotation. The former rose on account of a favourable trial crushing, when 15 tons yielded 42 ounces 14 dwts. Fingall Reefs at ¼, upon disquieting statements, and Mainland Consols at 3⅜ are both down. There has been no movement in Sherlaws, West Australian Goldfields, London and West Australian Exploration, Idaho, and North Boulder. Black Flag Consols were bought at 2 1/16, and Golden Plum at 1, the result of a favourable circular by the directors. In the Menzies group there has been little change with the exception of Lady Shentons. Menzies Reefs have gained ⅛ at 1⅜. Bayley's Reward show an improvement of 6d. at 6s., and White Feather at 2 are ⅛ up.

Miscellaneous.

In copper shares, with the exception of Anaconda, which at 6⅛ are ⅛ better, there has been a decided dulness. Owing, probably, to the doubt which exists as to the truth of the reports concerning the amount of that metal in stock. Mason and Barry Rio Tintos, and Thaisis are easier, but Rio Tinto, after being about 22, rose to-day to 22⅛. Among Indians, Mysore and Coromandel are firmer. Mysore Reefs at 9s. 9d. and West at ⅜ are the turn better. Ooregum are ⅛ down at 3⅛. Mysore Wynaad improved to 18s. Mount Lyell left off at 8⅜, a gain of ⅜. Among New Zealand shares, Waihi Silverton show a slight loss at 2⅛. Kathleen at 4s. 9d. and Kapanga at 14s. being a trifle better Taitapu Estates have seen 3⅛, being a rise of 10s., but a fall soon followed to 3⅛.

STOCK EXCHANGE SETTLING DAYS.
CONSOLS.
Tuesday, September 1.

Mining Making-up Days:	
Tuesday, August 25.	Saturday, September 12.
Mining Name Days:	
Wednesday, August 26.	Monday, September 14.
Account Days:	
Friday, August 28.	Wednesday, September 16.

COMPANY FINANCE.

Reports, Balance Sheets, Dividends, &c., of Mining and other Companies.

THE NEW BULTFONTEIN MINING COMPANY.

The following is the first annual report of the company for the period ended June 30:—Balance sheet. The accounts now placed before you show the profit for the year to be £30,902 4s. Of this sum £20,277 4s. is the profit on our mining work, and £10,000 is the profit on 20,000 shares sold by resolution of the shareholders at a meeting held on May 4, and subsequently confirmed at a meeting held on May 20, £625 being made on 5000 shares issued before the amalgamation with the Bultfontein Central Mines. On the delivery of the balance of the shares to the guarantors of the new issue, a further profit of £15,000 will be realised by the company.—Amalgamations. During the year we have acquired the properties of the Bultfontein Central Mines (Limited) and the Bultfontein Premier Company (Limited) with all their machinery, blue ground, and other assets. —Capital. On the formation of the company the capital was £65,000, of which 20,000 shares were held in reserve. Ten thousand of these shares were sold in compliance with a resolution of the shareholders. On the acquisition of the Bultfontein Central Mines (Limited) the capital was increased to £150,000, each company receiving for their assets 75,000 New Bultfontein shares, this arrangement resulting in a bonus of 50 per cent. in shares to the former shareholders of the New Bultfontein Company. On May 4, 1896, the capital was increased to £200,000, to provide funds for the underground system. On May 20 the capital was further increased to £250,000 for the acquisition of the assets of the Bultfontein Premier Company, for which we gave 27,500 shares, leaving 22,500 shares held in reserve by this company.—Dividends. Two interim dividends of 5 per cent. each have been declared by the board on the capital of £150,000 — viz., on March 31 and June 30, 1896. The directors have decided in future to pay the dividends half-yearly instead of quarterly.—Exchange of Claims. We have exchanged two claims with the Consolidated Bultfontein Company, the negotiations being carried out with the lessees of that company, the De Beers Consolidated Mines; this exchange has materially assisted the preliminary work in the claims.—Directors. On the formation of the company seven directors were provided for; during the year the board has been by various resolutions of the shareholders, and in consequence of the two amalgamations, increased to 14. Two directors will have to be chosen by the shareholders of the Premier Company.—Statistics. The company took over about 90,000 loads from the Bultfontein Central Mines, and

the table of statistics show that 219,854 loads were hauled during the year. We took over in addition about 80,000 loads from the Bultfontein Premier Company; we washed during the year 221,275 loads, leaving a balance on the floors of 168,579 loads. We have also 40,454 loads of lumps deposited. Both the blue ground and the lumps are stocked at an extremely low rate. The diamonds acquired from the blue ground washed amount to 42,484½ carats, and realised £47,161 5s. There has also been a large sum realised by the production from the tailings and lumps which are washed on percentage for the company.—Underground System. These works were started on June 9, and satisfactory progress is being made both in the shaft and mine development.—Machinery and Tramways. The different gears have been carefully erected at an extremely low cost. The tramways are in splendid order, and already extend to about 12 miles in length.—Management. Your directors deeply deplore the untimely death of the managing director, Mr. William Reed, who was from the outset a most enthusiastic and able worker for the company.—Finally. The directors have to thank the staff generally for their untiring activity for the benefit of the company, fully recognising in the prosperity of the concern their ardent and valuable services.

COLENBRANDERS AND THE CHARTERED COMPANY.

The following circular has been sent to the shareholders:—"Colenbranders Matabeleland Development Company (Limited), 71 and 72, King William-street, August 13. Dear Sir (or Madam),—With reference to the resolution carried at the extraordinary general meeting of shareholders held on the 27th ult., I beg to forward copy of a letter which has been recently received from the British South Africa Company. In view of this communication, and of the better prospects of an early suppression of the rising, I am to say that my directors do not propose to proceed any further in the matter. They wil make an early notification of this decision to those companies which have expressed their readiness to co-operate with us in promoting the end in view.—Yours faithfully, J. Durie Patullo, secretary." "British South Africa Company, 15, St. Swithin's-lane, E.C., August 11. Colenbranders Matabeleland Company (Limited), 71 and 72, King William-street, E.C. Dear Sir,—The attention of my directors has been called to the fact that you are approaching many of the sub-companies with a view to their subscribing, on similar lines to those which your company adopted by resolution of their shareholders at their meeting on July 27 last, when they voted the sum of £5000 for the purpose of aiding in the suppression of the revolt in Rhodesia. My directors desire me to convey to you the expression of their great appreciation of the loyal co-operation shown by your company, but, at the same time, I am to say that, to save the expenditure of further time and trouble in the matter by yourselves, and by any of our other sub-companies, they deem it right to inform you that they consider it the duty of the British South Africa Company itself to pacify the country with its own resources, and, under these circumstances, while thanking you for the proposed subscription by your company in particular, I must ask to be allowed to say that my directors would feel bound to decline its acceptance. May I ask you, then, in repeating the thanks of my directors in the necessary quarters, at the same time to be so good as to obviate further progress in the suggested movement.—I am, dear Sirs, yours faithfully, Herbert Canning, secretary."

ROBINSON SOUTH AFRICAN BANKING COMPANY (LIMITED).

The Association of Mines of the South African Republic have cabled to their London agents, the Robinson South African Banking Company (Limited), that for the month of July an output amounting to 35,352 ounces was obtained by the following companies:—Roodepoort United Main Reef, Meyer and Charlton, Princess Estate, Van Ryn, George Goch (Amalgamated), Wemmer, Langlaagte Estate, Block B Langlaagte Estate, Lancaster, Langlaagte Star, New Midas Estate. This compares with 33,707 ounces in the preceding month.

HAMPTON PLAINS ESTATE (LIMITED).

The following circular has been issued by the London office to the shareholders.—In reference to Circular No. 4, as to when the statement of accounts would be presented to the shareholders in general meeting, the directors now beg to inform the shareholders that the accounts from Australia have only recently been received, and are now being embodied in the London books. They will, in due course, be submitted to the auditors, but the directors doubt whether, in any case, the accounts could be prepared and audited during the month of August; and further, if they would be doing right in holding the shareholders' meeting during that month, whilst so many shareholders are away on their vacation. The directors, therefore, have decided to hold the meeting in September, and notices will be sent as soon as the accounts have been settled and passed by the auditors.

A NEW RAIL JOINT.—A new spring rail joint has lately been devised by Professor Dr. Köpcke, of Dresden. The new joint has been designed to give both lateral and vertical stiffness, while permitting lengthwise expansion of the rails. To make it in an ordinary T rail two lengthwise saw kerfs are made in the web for about a foot at each end, separating the web from the head and the flange respectively. The head is then entirely removed by a crosscut for about the same length, the web bent inwardly at right angles and the flange bent downwards, also at right angles. These bent portions may then be joined to corresponding portions of a similarly treated rail by bolts or rivets, suitably spaced holes having been punched before the bending.—*Colliery Guardian.*

NEW ISSUE.

NEW ZEALAND MINERALS COMPANY (LIMITED).

This company has been formed with a capital of £250,000 in £1 shares, of which 2500 are deferred and are not entitled to participate in the profits of any one year until 20 per cent. for that year has been paid on the ordinary, when they will be entitled to one-half the remaining profits. The present issue is 100,000 ordinary and 1000 deferred, subscribers for 100 ordinary being entitled to one deferred share. The prospectus states that the company has been formed to conduct the business usually carried on by an exploration, development, finance, and agency company, more particularly in regard to gold mining in New Zealand. It is pointed out that the remarkable development of mining in that colony and the satisfactory results obtained are evidence that this field offers great opportunities for profitable investment. In March last Messrs. Heasman and Company (Limited) sent out to New Zealand, Mr. Robert Andrew, who secured options on several properties which are believed to be of great value, and the benefit of Mr. Andrew's services, including the options already secured, will be transferred to this company. The subscription of half of the ordinary issue has been guaranteed. The consideration to Messrs. Heasman for the benefits of Mr. Andrew's services, options, &c., transferred, as well as for the above-mentioned guarantee, will be the right to an allotment to them or their nominees of the 2500 deferred shares, less those to be allotted under the terms of the prospectus.

AFRICAN MINES' JULY OUTPUT.

	Feb. Ozs.	Mar. Ozs.	Apr. Ozs.	May. Ozs.	June. Ozs.	July. Ozs.
GOLD						
Appantoo	—	—	—	376	226	—
Barrett	571	533	400	500	503	650
Block B	2,624	2,870	3,153	2,854	2,511	3,075
Buffelsdoorn	2,539	2,202	—	—	—	—
Champ d'Or	2,377	2,920	3,360	3,383	3,074	—
City and Suburban	8,037	8,203	7,835	8,351	8,296	—
Crown Reef	10,845	11,303	11,498	11,369	10,723	11,011
Durban-Roodepoort	5,282	5,558	5,590	5,519	5,604	5,704
Eastleigh	1,844	2,100	2,155	1,650	1,850	1,750
Ferreira	11,770	12,770	12,219	13,115	13,418	13,601
Forbes Reef	144	150	102	67	—	115
Graskop	201	310	222	204	180	236
Geldenhuis Deep	2,793	3,684	4,046	4,173	4,031	5,180
Geldenhuis Estate	5,815	6,204	6,139	5,897	6,889	7,319
Geldenhuis Main Reef	1,876	1,881	1,655	1,214	1,589	1,495
George Goch	3,082	3,383	4,362	4,660	3,740	3,708
Ginsberg	910	938	1,175	1,018	1,015	1,084
Glencairn Main Reef	4,401	4,246	4,527	3,230	3,468	3,824
Henry Nourse	5,288	6,166	6,223	6,298	6,649	6,904
Joe's Reef United	155	175	227	294	227	249
Johannesburg Pioneer	2,698	2,621	2,613	2,810	2,826	3,064
Jubilee	2,472	2,323	2,485	3,059	2,502	2,812
Jumpers	3,317	3,704	4,202	4,935	4,077	4,960
Lancaster	253	—	—	—	—	—
Langlaagte Estate	9,165	9,568	9,002	9,428	9,131	9,25
Langlaagte Royal	—	—	—	3,182	3,704	4,30
Langlaagte Star	—	—	—	1,207	1,491	1,81
Lisbon-Berlyn	821	842	763	737	655	785
Lydenburg Ming. Estate	—	4,945	5,404	6,153	5,770	4 941
May Consolidated	3,237	3,871	4,323	4,878	5,204	4,741
Meyer and Charlton	3,008	3,457	4,006	3,979	4,109	4,249
Minerva	276	—	1,379	1,453	1,856	—
Moodies	1,000	1,150	1,764	690	940	—
New Chimes	1,653	1,692	1,764	1,746	1,825	2,319
New Clewer Estate	1,683	—	—	—	—	—
New Comet	1,985	233	—	—	—	2,488
New Croesus	3,058	2,724	2,441	2,772	2,454	2,577
New Heriot	5,716	6,045	6,011	6,033	6,014	5,961
New Kleinfontein	2,308	—	—	—	—	—
New Midas	—	—	—	—	—	731
New Modderfontein	—	—	—	2,172	2,778	3,150
New Primrose	9,101	9,105	9,547	9,004	9,786	10,752
New Rietfontein	2,297	2,349	2,327	2,117	2,150	1,724
Nigel	2,079	1,798	2,001	2,026	2,274	1,990
Orion	2,867	—	—	897	—	—
Paarl Central	220	—	—	—	—	—
Pigg's Peak	66	—	—	—	—	—
Porges-Randfontein	1,129	—	—	—	—	—
Prem. Tati Monarch Reef	—	—	—	—	368	—
Princess Estate	1,874	1,537	1,671	2,072	2,274	2,432
Robinson	14,823	16,267	15,927	19,333	20,343	20,612
Roodepoort Deep	—	—	1,263	2,171	1,927	—
Roodepoort Gold	—	—	—	—	1,214	1,358
Roodepoort United M.R.	3,820	4,001	3,961	4,121	3,919	4,067
Salisbury	1,950	2,450	2,850	2,950	2,400	2,400
Sheba	10,028	12,500	10,340	10,024	8,589	8,100
Simmer and Jack	7,753	8,636	8,640	8,653	8,816	8,855
Spitzkop	384	286	—	—	—	85
Stanhope	810	870	960	920	1,100	1,100
Sutherland Reef	430	378	134	—	—	—
Tati Blue Jacket	—	—	—	—	328	—
Transvaal Gold	2,330	4,945	—	—	—	—
Treasury	—	—	—	2,373	2,312	2,584
United Ivy Reef	624	590	649	570	700	685
United Langlaagte	578	367	—	—	—	—
Van Ryn	2,031	2,088	1,585	1,551	1,633	—
Wassau	—	—	—	345	388	626
Wemmer	4,967	5,202	5,597	5,148	4,636	4,891
Wolhuter	4,906	5,524	4,778	5,043	5,884	6,135
Worcester Exploration	1,850	2,453	2,444	2,444	2,819	2,431
DIAMONDS.	Carats.	Carats.	Carats.	Carats.	Carats.	Carats.
Koffyfontein	4,250	4,500	4,750	3,700	4,150	4,400
New Gordon	2,118	—	—	—	—	—
COAL.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Cassel Coal	22,435	25,017	26,500	18,500	24,000	27,000
Great Eastern	15,432	16,100	16,500	13,200	16,600	20,000
Transvaal Coal Trust	24,500	29,400	32,200	—	27,800	33,000

The following are the profits or losses (the latter being indicated by an *) made by South African mining companies:—

	£	£	£	£	£	£
City and Suburban	10,011	10,751	7,865	7,412	—	—
Crown Reef	14,707	18,050	16,324	15,787	14,134	—
Ferreira	—	—	—	28,158	30,286	—
Geldenhuis Deep	—	—	3,400	—	—	2,400
Geldenhuis Estate	4,400	7,477	4,600	2,800	6,500	7,200
Geldenhuis Main Reef	2,662	2,597	1,402	95*	1,554	721
George Goch	1,703	1,739	4,004	4,167	—	—
Glencairn	5,769	7,092	4,226	—	—	—
Jumpers	2,000	2,250	3,000	3,835	880	1,910
May Consolidated	—	1,600	2,089	2,888	4,376	—
Meyer and Charlton	2,430	3,660	4,010	3,225	3,701	4,771
New Heriot	10,289	11,113	11,160	8,916	—	—
New Primrose	6,552	—	—	—	6,594	10,307
New Rietfontein	—	—	—	—	—	—
Princess Estate	1,247	—	—	—	—	—
Robinson	25,000	26,000	27,500	35,241	38,500	35,000
Roodepoort United	6,000	6,457	5,500	4,295	—	—
Simmer and Jack	7,653	11,466	11,463	—	10,216	—
Transvaal Gold	—	—	—	—	—	—
Van Ryn	1,505	1,246	70	720*	526*	—
Wemmer	6,559	6,680	7,263	6,145	3,909	4,950
Worcester	—	—	—	—	4,053	—
DIAMONDS.						
Un. Mines, Bultfontein	—	—	—	—	—	—
COAL.						
Cassel Coal	—	4,900	5,500	1,838	4,992	6,100
Great Eastern	—	2,300	—	1,500	2,200	3,200
Transvaal Coal Trust	3,000	3,000	—	—	2,200	2,700

RAND OUTPUT FOR JULY.

THE gold crushings at Witwatersrand, according to a cable received by the Union Steamship Company, for the month of July were 203,873 ounces. This shows an *increase* of 10,233 ounces, as compared with the previous month's total, and an *increase* of 4420 ounces, as compared with the corresponding month of last year. The following table gives crushings to date:—

	1891	1892	1893	1894	1895	1896
	Ozs. dwt.	Ozs. dwt.	Ozs.	Ozs.	Ozs.	Ozs.
January	53,205 15	84,580 8	108,374	149,814	177,483	148,178
February	50,079 2	88,649 8	93,252	151,870	169,295	167,018
March	57,949 1	93,244 11	110,474	165,372	184,545	173,9?2
April	55,871 16	95,562 6	124,053	168,745	186,323	174,518
May	54,673 1	99,426 6	116,911	169,773	194,581	195,008
June	58,868 1	93,252 3	122,907	168,162	200,941	193,640
July	54,926 10	110,379 1	126,169	167,953	193,453	203,873
August	59,070 4	102,322 3	156,959	174,977	203,573	—
September	65,691 5¼	107,851 13	129,585	178,707	194,784	—
October	72,793 8	112,147 8	138,599	173,978	197,452	—
November	73,393 15	106,794 15	138,640	175,304	195,118	—
December	80,313 15	170,748 17	146,357	182,701	178,928	—
	729,137 2¼	1,120,564 1	1,473,473	2,024,159	2,277,535	1,156,237

THE METAL MARKETS.

THE METAL MARKET, LONDON, AUGUST 14.

Copper.

As regards consumers' business, the market is featureless, but further transactions with America are reported. There has been a good turnover in the speculative market, averaging about 1000 tons per day, and the tendency has been towards a lower level. The opening was easier at £48 2s. 6d. for cash and forward, and Tuesday and Wednesday showed about 5s. decline. On Thursday, in an active market, down to £47 7s. 6d. cash and three months was accepted, a slight recovery following. On Friday the market was irregular up to £47 17s. 6d. three months being paid, relapsing again to £47 11s. 3d., and the close is dull at £47 11s. 3d., and £47 11s. 3d. three months, with middle dates at about 1s. 3d. premium.

Tin.

The market for Straits remained steady at £60 cash, £60 12s. 6d. three months, but fell off on Thursday to £59 17s. 6d. cash, £60 10s. three months. The close on Friday night was steady at £60 cash and £62 12s. 6d. three months sellers. Dutch market opened at 36½ fl. cash, 36⅜ fl. three months Billiton, and gradually declined to 35⅞ fl. cash, 36¼ fl. three months for Billiton, and Banca at 36⅜ fl. at which the market closes flat.

Pig Iron.

Scotch shipments for last week were 7500, or 1250 more than same week last year. The business on the Glasgow market has been small; fluctuations have been within narrow limits, and the close for Scotch is better by 3d. per ton. To-night's quotations are:—Cash, Scotch, 45s. 7d. to 45s. 8d.; three months, 45s. 9d. to 45s. 9½d. Middlesbro' and hematite have shown little change, and close steady at 36s. 7½d. and 46s. 7d. respectively.

Lead

is quoted slightly easier, but the demand is fair, and almost keeps pace with the supply.

Spelter.

There has been no active support, and prices have suffered a serious decline, but the close is firmer.

Antimony

dull, without new feature, at £29 10s.

Quicksilver

steady, £6 7s. 6d. firsts, and £6 6s. 6d. seconds.

The following are to-night's (August 14) prices of metals:—

	£	s.	d.		£	s.	d.
Copper							
Tough cake and ingot	49	10	0		50	0	0
Best selected	50	10	0		51	0	0
Electrolytic Copper	50	10	0		51	0	0
Sheets and sheathing	—				59	0	0
Flat bottoms	—				62	0	0
Chili bars (spot, & 3 months respectively)	47	11	3		47	11	3
Good merchantable, (spot, & 3 months respectively)							
Copper tubes, seamless	—				0	0	8½
Alloys							
BRASS: Wire	—				0	0	6
,, Tubes (solid drawn)	—				0	0	7
,, Sheets	—				0	0	6½
PHOSPHOR BRONZE: Alloys II.	—				81	0	0?
,, ,, III. or VII. (Cog Wheel Brand)	—				83	0	0
,, ,, XI.	—				75	0	0
,, ,, Vulcan brand A1	—				72	0	0
EURO METAL	—				73	0	0
BULL'S METAL	—				65	0	0
Ferrobronze (Vivian's)							
Ingots...per lb.	0	0	8		—		—
Ordinary sheets, plates, bolts and bars	0	0	7		—		—
Screw bolts and nuts	0	0	8½		—		—
Pump rods, plain	0	0	7½		—		—
,, finished	0	0	10½		—		—
DELTA METAL: No. 4 (per ton)	—				—		—
,, Sheets and plates (per lb.)	—				—		—
,, Bars, round, square, flat (per lb.)	—				—		—
,, ,, hexagon (per lb.)	—				73	0	0
Tin							
English, ingots, f.o.b.	63	10	0		—		—
,, bars	64	10	0		—		—
,, refined	65	10	0		—		—
Straits, spot, and three months respectively	59	17	6		60	10	0
Australian, spot, and three months respectively	60	15	0		61	7	6
Banca ,, (in Holland)	—				61	0	0
TIN PLATES: Charcoal, best quality per box	0	14	0		0	13	0
,, ,, ordinary	0	11	6		0	13	6
,, Coke, best quality	0	10	6		0	10	3
,, ,, ordinary	0	9	9		0	10	0
These prices of tinplates are f.o.b. at Swansea; at Liverpool 6d. per box more.							
Iron							
Pig, G.M.B., f.o.b., Clyde, spot	—				2	5	7
,, Scotch pig, No. 1 Gartsherrie	—				2	9	6
,, ,, Coltness	—				1	12	0
,, ,, Clyde	—				2	8	6
,, ,, Govan	—				2	7	6
Bars, Welsh, f.o.b. Wales	—				5	10	0
Plates ,, ,,	—				6	10	0
Bars, Staffordshire, at works	—				5	10	0
Sheets ,, ,,	—				6	15	0
Plates ,, ,,	—				6	10	0
Hoops ,, ,,	—				5	15	0
Ship plates, Middlesborough	—				—		—
STEEL: English spring	—				10	0	0
,, ,, cast	—				42	0	0
,, Rails at works, according to section	—				5	0	0
Lead							
Spanish or soft foreign	—				10	18	9
English pig, common	—				11	3	6
,, L.B.	—				11	12	
,, sheet and bar lead	—				12	0	
,, pipe	—				12	10	
,, red	—				14	0	
,, white	—				17	10	
,, patent shot	—				14	15	0
Spelter							
Silesian ordinary brands	16	10	0		16	15	0
,, special brands	16	15	0		17	0	0
English Swansea	17	0	0		17	5	0
Sheet Zinc	—				19	15	0
Antimony							
Antimony	29	0	0		30	0	0
Quicksilver							
Flasks, 75 lbs. warrants	6	6	0		6	7	6
Manganese Ore, c.i.f., U.K. ports — per unit.							
1st quality, 50 per cent. and upwards	0	0	11		0	1	0
2nd ,, 47 per cent. to 50 per cent.	0	0	10		0	1	0
3rd ,, 40 ,, 47 per cent.	0	0	9		0	0	11
Aluminium	Per lb.				Per lb.		
93-99½ per cent.	0	1	4½		0	1	6
Nickel							
98-99 per cent. guaranteed	0	1	2		0	1	4

A NEW MAP OF BRITISH COLUMBIA.—We have received a copy of a new map of the East and West Kootenay districts, British Columbia. The district is one of the richest and most promising in the colony, and hence this map is of much value at the present moment. The information contained in the map may be safely relied upon, as Mr. Frank Fletcher, P.L.S., Nelson, the compiler, has sought the assistance of the Provincial and Dominion Government surveys in carrying out the work. He has also been aided by explorations and surveys by other provincial land surveyors. To those interested in the district the map will prove of the utmost service, and, in view of the great attention the British Columbia field is now receiving, one may safely predict a large demand for it.

SALE OF A CORNISH MINE.—Particulars will be found in our advertising columns of the sale by public auction of the Wheal Friendly Tin Mine (St. Agnes, Cornwall), which is to take place at Tabb's Hotel, Redruth, on September 2 next, at three o'clock. The mine is to be disposed of as a going concern, and from its admirable situation among the other mines in the district should not go long without finding a purchaser.

"THE MINING JOURNAL" SHARE LIST.

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references which occur in the Share List:—*Ay*, Antimony; *A*, Arsenic; *Bl*, Blende; *Bx*, Borax; *C*, Copper; *D* Diamond; *G*, Gold; *I*, Iron; *L*, Lead; *M*, Mundic; *N*, Nitrates; *P*, Phosphates; *Q*, Quicksilver; *R*, Ruby; *S*, Silver; *S-l*, Silver-lead; *Sul*, Sulphur; *T*, Tin; and *Z*, Zinc. * in the "Amount of Share" column of British Mines signifies that the mine is conducted on "Cost Book" principles; ‡ in the "Head Office" column of African Mines signifies that the address given is not that of the head office but of a sub, or transfer office; and †, following the names of African Mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

*** The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

AFRICAN MINES.

Name.	Closing Price, Aug 14, 1896	Closing Price Aug. 7, 1896.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£		£ s. d.			
Abbott's Con. Reefs	6/ 7/	6/ 7/	1 0	—	1 0 0	—	De Kaap	Broad Street Avenue
African Estates......	1 13/16 1 15/16	1 11/16 1 13/16	1 0	2/& rts Oc. 18 95	1 0 0	438,600	,,	3, Copthall-buildings
Gold Rcvry.	1 13/16 1 15/16	1 7/8 2	1 0	rts Oct 30 '95	1 0 0	175,000	—	23, College Hill.
Africana	9/16 11/16	9/16 11/16	1 0	—	1 0 0	1,075,000	—	34, Clement's lane
Afrikander ...... G	1 3/8 1 3/4	1 1/2 1 3/4	1 0	rts May 24 '95	1 0 0	40,000	Transvaal.	23, College Hill
Aldler Consolidatd	1 5/16 1 7/16	1 5/16 1 7/16	1 0	—	1 0 0	250,000	—	1, Moorgate place.
Alexandra Estate G	11/16 13/16	5/8 3/4	1 0	—	1 0 0	225,000	Rand	16, George street
Angelo	4 3/4 5	4 5/8 4 7/8	1 0	—	1 0 0	175,000	—	Winchester House
Anglo-French Exp.	4 3/4 4 7/8	4 5/8 4 3/4	5 0	7/ May 29 '96	5 0 0	30,300	S. Africa	3, Princes street
,, Matabeleland	1 3/4 2 1/8	2 2 1/8	1 0	—	1 0 0	39,750	Matabld.	Winchester House.
Appantoo .... G	—	—	1 0	—	1 0 0	77,885	West Cost	Dashwood House.
Aurora .... G	1 1/4 1 1/2	1 1/8 1 3/8	1 0	5% Mar.,'93	1 0 0	65,000	Rand	8, Old Jewry.‡
,, West United.	1 1/4 1 1/2	1 1/4 1 1/2	1 0	—	1 0 0	100,000	,,	7, Lothbury
Austral-African ...	1 1/4 1 3/8	1 3/16 1 5/16	1 0	3/-Dec. 16 '95	1 0 0	250,000	—	Token Ho., Opthl Av
Balkis Eersteling G	1/3 1/9	1/3 1/9	10/	—	0 10 0	520,000	Transvaal	85, Gracechurch-st.
,, Land	5/ 5/6	5/ 5/6	10/	1/ Feb. 13, '96	0 0 0	520,000	,,	,,
Bantjes Consol ...G	3 11/16 3 13/16	3 9/16 3 11/16	1 0	rts Sep 24 '95	1 0 0	83,000	,,	15, Geo. st., Mn Ho.
Barnato Bank	2 1/8 2 1/4	2 1/8 2 1/4	1 0	—	1 0 0	2,625,000	—	7, Lothbury
,, Consol ...	2 3/4 2 7/8	2 13/16 2 15/16	1 0	—	1 0 0	1,000,000	—	,,
Barrett.......... ...G	12/6 13/6	13/ 14/	10/	—	0 9 0	207,496	De Kaap	17, Basinghall-street
Bechuanaland Exp.	1 5/16 1 7/16	1 1/4 1 3/8	1 0	rts Jy 24 '95	1 0 0	400,000	Bechuana.	19, St. Swithin's-lane
,, Trad'g Assoc.	1 1/8 1 3/8	1 1/8 1 3/8	1 0	1/6 July 15,'96	0 10 0	94,307	,,	72, Basinghall street
Big Golden Quarry	/6 1/	/6 1/	5/-	—	0 5 0	483,226	Kaap Rivr	Warnford Court.
Block "B" Lang.	1 11/16 1 13/16	1 11/16 1 13/16	1 0	—	1 0 0	535,000	Rand	8, Princes-st., E.C.‡
Bonanza	2 5/8 2 7/8	2 13/16 2 15/16	1 0	—	1 0 0	200,000	Turffont'n	120, Bishopsgate-st.
Brit. S. A. Char. ...	2 13/16 2 15/16	2 9/16 2 11/16	1 0	rts Jy 26 '95	1 0 0	1,999,760	S. Africa	15, St. Swithin's-lane
Buffelsdoorn...... G	2 1/8 2 3/8	2 1/8 2 3/8	1	16/- Nv. 28 '95	1 0 0	250,000	Potchefstr	7, Lothbury.
,, Central	5/8 3/4	5/8 3/4	1 0	—	1 0 0	—	—	8, Old Jewry
,, Consolidated	7/16 9/16	1/2 5/8	1 0	—	1 0 0	225,000	—	Warnford Court
Cape Asbestos	3/4 1	3/4 1	1 0	—	1 0 0	50,311	Orange Rv	19, St. Swithin's-lane
,, Copper C	2 7/16 2 9/16	2 7/16 2 9/16	2 0	2/ June 12, '96	2 0 0	300,000	Cape Col.	9, Queen-street-place,
,, 6% Pref. ...	2 5/8 2 7/8	2 5/8 2 7/8	2 0	2/ June 12, '96	2 0 0	45,000	,,	,,
Cassel Coal..........	1 5/8 1 7/8	1 11/16 1 13/16	1 0	1/6 Apr. 29 '96	1 0 0	75,000	Johanbrg.	99, Cannon-street.
Cen. de Kaap	/6 1/	1/ 1/6	5/-	—	0 2 6	—	De Kaap	Palmerston Bldgs
,, Roodp't Deep	1 7/8 2 1/8	1 3/4 2	1 0	—	1 0 0	210,000	—	120, Bishopsgate st.
Champ d'Or...... G	1 3/4 2 1/4	1 3/4 2 1/4	1 0	3/2 Feb. 27 98	1 0 0	118,016	and	8, Old Jewry, E.C.
Charterland G.F ...	9/16 11/16	9/16 11/16	1 0	—	1 0 0	150,000	—	19, S. Swithin's lane
Chimes West	1 3/8 1 5/8	1 3/8 1 5/8	1 0	—	1 0 0	150,000	—	Winchester Ho.
City and Sub. Nw G	4 5/8 4 7/8	4 5/8 4 7/8	4 0	10/- June '95	4 0 0	340,000	Rand	Gresham Ho.
Con. Bultfontein D	32/ 33/	32/ 33/	1 0	9d. July 15,'96	1 0 0	721,500	Griqualnd	62, Lombard-st.
Con. Deep Levels G	5 5 1/4	4 3/4 5 1/4	1 0	4/- Jy 15, 96	1 0 0	187,250	Transvaal	30, St. Swithin's-lane
Con. G. Fields S A.	12 3/4 12 7/8	11 5/8 11 7/8	1 0	10/ May 14 '96	1 0 0	1,250,000	S. Africa	8, Old Jewry.
Do. 6% Pref.	24/3 24/9	24/3 24/9	1 0	7 1-5d Jne26'96	1 0 0	1,243,999	,,	,,
Do. 5½% Deben...	108 109	108 1/2 109 1/2	5 0	5 1/2% July1,'96	5 0 0	600,000	,,	,,
Crown Deep ......G	11 3/4 12 1/4	11 3/4 12	1 0	—	1 0 0	250,000	Rand	120, Bishopsgate-st.
,, Reef ......G	11 11 1/4	10 3/4 11	1 0	10/-Apr. 29 '96	1 0 0	120,000	,,	,,
DeBeers Consol. D	29 3/8 29 5/8	29 29 1/4	5 0	22/- July15 '96	5 0 0	789,791	Kimberl'y	62, Lombard-street.
Do. 6% 1st Deb....	110 1/2 111 1/2	109 1/2 110 1/2	—	5% July 1 '96	—	£3,500000	,,	,,
Do. 5½% Bul. Ob.	104 106	105 107	—	5½% Apr. 1 96	—	720,000	,,	
Doornkop	3/ 4/	3/ 4/	1 0	—	1 0 0	250,000	Doornkop	Warnford Court
Driefontein	2 3/4 3	2 5/8 2 7/8	1 0	—	1 0 0	175,000	—	Winchester Ho.
Durban Roodept. G	7 1/16 7 3/16	7 7 1/4	1 0	3/- June 26'96	1 0 0	£125,000	Rand	28, Leadenhall-bldgs
,, Deep.........	4 4 1/4	3 7/8 4 1/8	—	—	—	—	—	
Eastleigh ....G	7/8 1	13/16 15/16	1 0	rts May 14 '96	1 0 0	240,000	Klerksdrp	57, Leadenhall Street
East Orion.......... ...	1/8 1/4	1/8 1/4	1 0	—	1 0 0	275,000	Rand	8, Old Jewry.
,, Rand......... G	7 1/16 7 3/16	6 7/16 6 9/16	1 0	—	1 0 0	570,000	,,	170, Winchester-ho.
Exploration	2 7/8 3 1/8	2 7/8 3 1/8	1 0	rts June 26 '96	1 0 0	148,000	S. Africa	30, S. Swithin's-ln.‡
Exploring L & M...	1 3/16 1 5/16	1 1/16 1 3/16	1 0	2/ Dec. 16, '95	1 0 0	216,215	,,	19, ,,
Ferreira ....G	20 1/2 21 1/2	20 21	1 0	13/ Mar. 12 '96	1 0 0	45,000	Rand	120, Bishopsgt st. Wn‡
French Rand	2 3/4 2 7/8	2 3/4 3	1 0	—	1 0 0	480,000	Rand.........	28, Austin Friars.
Geldenhuis Deep G	5 5 1/4	4 3/4 5 1/4	1 0	—	1 0 0	265,000	Transvaal .	30, St. Swithin's-lane
Geldenhuis Est. G	3 5/8 3 3/4	3 5/8 3 3/4	1 0	6/- Jy 26 '95	1 0 0	187,500	Rand	120, Bishopsgt st. Wn‡
,, Main Reef	15/16 1 1/16	1 1 1/8	1 0	2/ Feb. 13 96	1 0 0	150,000	,,	Warnford Court, E.C
George Goch ...G	2 1/4 2 3/8	2 1/8 2 3/8	1 0	—	1 0 0	100,000	,,	Johannesburg.
Ginsberg New ...G	1 7/8 2	1 13/16 1 15/16	1 0	—	1 0 0	130,000	Drietfon .	Warnford Court, E.C‡
Glencairn ....G	3 3/8 3 5/8	3 3/16 3 5/16	1 0	2/6 Feb. 13 '96	1 0 0	200,000	Rand	2, Drapers-gardens.
Golden Dove	1 5/8 1 7/8	1 7/8 2 1/8	1 0	—	1 0 0	60,000	Natal	65, Chancery Lane.
Gld. Fls. Deep...G	11 1/8 11 3/8	10 7/8 11 1/8	1 0	—	1 0 0	600,000	S. Africa	8, Old Jewry.
G.F. of Lydenb'rg	3 1/4 3 1/2	3 1/4 3 1/2	1 0	—	—	—	Lydenb'rg	7, Lothbury.
G. F. of Mashonld.	1/4 3/8	3/16 5/16	1 0	—	1 0 0	200,000	Mashonld.	19, St. Swithin's-ln.
G.F. of T. de Fuego	—	10/3 10/9	—	—	—	—	—	75, Lombard Street.
Graskop ....G	4/6 5/	4/6 5/	5/-	2 1/2% Mar. '92.	0 5 0	400,000	Lydenburg	2, Tokenhouse Bldgs
Gt. Estrn. Colliery	1 1/16 1 3/16	1 1 1/8	1 0	—	1 0 0	376,666	Grootolei	Gresham House.
Griqualand W....D	8 8 1/4	8 8 1/4	10 0	4/ July 15, '96	10 0 0	105,700	Transvaal .	62, Lombard-street
Heidelbg. Est. Ex:	1/2 5/8	9/16 11/16	1 0	—	—	—	Heildelbg.	
Henderson's Trans	2 7/16 2 9/16	2 1/4 2 3/8	1 0	—	1 0 0	250,000	Zoutpar.bg	85, Gracechurch st.
Henry Nourse ...G	6 5/8 6 7/8	6 5/8 6 7/8	1 0	—	1 0 0	100,000	De Kaap ...	Warnford-court.
Hetty	9/16 11/16	9/16 11/16	1 0	—	1 0 0	110,000	Middlevei.	55, Bishopsgate st Wn
Joe's Reef ....G	3/16 5/16	3/16 5/16	1 0	—	1 0 0	57,404	,,	21, Mincing Lane.
Johannesbrg Invst	3 3/4 3 7/8	3 11/16 3 13/16	1 0	1/ July 15, '96	1 0 0	650,000	—	7, Lothbury.
,, Pioneer	8 1/2 9	8 1/2 9 xd	1 0	12 1/2% Nov.,'93	1 0 0	21,000	Rand.........	Johannesburg.
Jubilee ....G	8 7/8 9 1/8	8 1/2 9 xd	1 0	2/ July 30 '96	1 0 0	30,000	,,	8, Old Jewry.†
Jumpers ....G	6 1/2 6 3/4	6 3/8 6 5/8	1 0	6/- Mar. 27 '96	1 0 0	100,000	,,	120, Bishopsgt st. Wn‡
,, Deep......	5 6	5 6	1 0	—	1 0 0	300,000	,,	30, S. Swithin's lane
Kimberley .. ..D	5/16 7/16 pm	5/16 7/16	1 0	1/ June 26, '96	0 10 0	98,672	Kimberley	19, Finsbury circus.
,, Rdpt....	2 1/8 2 3/8	2 1/8 2 3/8	1 0	—	1 0 0	125,000	,,	2, Drapers-gardens.
Kleinfontein Cen.	5/8 7/8	5/8 7/8	1 0	—	1 0 0	225,000	E. Rand ...	Winchester House
Klerksdorp	13/9 14/3	13/3 13/9	10/-	—	0 10 0	400,000	Klerksdorp	110, Cannon St.
Knight's Deep	2 1/2 2 7/8	2 1/4 2 1/2	1 0	—	1 0 0	295,194	Rand..... ...	8, Old Jewry
Koffyfontein......D	7/8 1	13/16 15/16	1 0	x.rts. Jun10'96	1 0 0	125,000	Jacobsdaal	6, Gt. St. Helen's.
Lancaster	2 1/8 2 3/8	2 7/16 2 9/16	1 0	—	1 0 0	226,500	Luip. Viel	120, Bishopsgt st. Wn
Langlaagte Est. G	5 1/8 5 3/8	5 5 1/4 xd	1 0	3/ July 30 '96	1 0 0	470,000	Rand.........	59, Holborn Viaduct
Royal	1 7/8 2	1 13/16 1 15/16	1 0	rts. Mar. 8 '95	1 0 0	100,000	,,	2, Drapers-gardens.
,, Star...	1 3/8 1 5/8	1 3/8 1 5/8	1 0	—	1 0 0	170,000	,,	
Lisbon-Berlyn ...G	6/ 6/6	6/ 6/6	2/6	—	0 2 6	883,233	Lydenburg	Suffolk House.
Lon. Paris Fin & M.	1 1/8 1 1/4	1 1/16 1 3/16	1 0	—	1 0 0	500,000	—	53, Old Broad Street
London & S. A. Ex.	14 14 1/2	14 14 1/2	10/	4/- June 26 '96	0 10 0	100,000	S. Africa ...	19, Finsbury-circus.
Luipaards Vlei Est.	2 3/16 2 7/16	2 5/16 2 9/16	1 0	6% Mar. '90	1 0 0	319,003	Rand..... ...	Warnford-court.‡
Lydenburg Estate.	1 1/4 1 3/8	1 1/4 1 3/8	1 0	—	1 0 0	190,000	Lydenburg	85, Gracech. Street
,, Ld & Expl	1/4 1/2	1/4 3/8	1 0	—	1 0 0	200,000	,,	120, Bishopsgte St.
,, M'g. Est.	6 7/8 7 1/8	6 5/8 6 7/8	1 0	—	1 0 0	300,000	,,	,,
Main Reef (New) G	1 1/4 1 3/8	1 3/8 1 5/8	1 0	—	1 0 0	111,500	Rand.........	15, George St., MnH
Malmani Gold Syn	2/ 4/	2/ 3/	2/6	—	0 2 6	200,000	Transvaal	Throgmorton House
Marie Louise.........	2 7/8 3 1/8	2 7/8 3 1/8	1 0	—	1 0 0	60,000	Rand.........	15, George St., Mn H
Marievale Nigel ...	1 1 1/4	1 1 1/4	1 0	—	1 0 0	250,000	,,	,,
Mashon. Agency...	2 5/16 2 7/16	1 3/4 2	1 0	2/ Ap. 16 '96	1 0 0	100,000	Mashonald	8, Old Jewry, E.C.
,, Central...	7/8 1	3/4 7/8	1 0	—	1 0 0	180,000	,,	,,
Matabelel'd G. R't	4 1/8 4 3/8	3 5/8 3 7/8	1 0	—	1 0 0	110,000	Matabelel'd	3, Copthall-buildings
May Con. (New) G	2 5/8 2 7/8	2 11/16 2 13/16	1 0	2/- Mar. 12 96	1 0 0	236,500	Rand..... ...	4, Lothbury.‡
Meyer & Charl....G	5 3/8 5 5/8	5 1/4 5 1/2	1 0	5/ Feb. 13 96	1 0 0	75,020	,,	1, Crosby Square.‡
Minerva	1 1 1/8	7/8 1 1/8	1 0	—	1 0 0	150,000	,,	Winchester House.
Mines Selection ...	7/8 1 1/8	7/8 1 1/8	1 0	—	1 0 0	100,000	—	33, Br'd St. Avenue.
Modderfontein.. G	6 3/8 6 5/8	6 6 1/4	1 0	—	1 0 0	200,000	Rand.........	13, George Street
,, 'B" Extensn.	1 3/8 1 5/8	1 3/8 1 5/8	—	—	—	—	—	28, Austin Frias
Molyneux Consoli.	1 3/4 2	1 3/8 1 5/8	1 0	—	1 0 0	220,000	Modderftn	120, Bishopsgate st
Moodies ....G	15/16 1 1/16	15/16 1 1/16	1 0	-/4 May '90	1 0 0	240,000	,,	Gresham House.‡
Mozambique.........	1 9/16 1 11/16	1 7/16 1 9/16	1 0	—	1 0 0	400,000	S.E. Africa	13, Austin Friars.
Namaqua C	1 3/4 2	1 3/4 2	2 0	3/- July 15 '96	2 0 0	94,351	Namaquald	24, Leadenhall-blds.
New African	3 3 1/4	2 3/4 3 1/4	1 0	5/ July 15 '96	1 0 0	190,000	—	83, Hatton Garden.
,, Bultfontein D	1 3/8 1 7/8	1 3/8 1 7/8	1 0	1/- July 20 '96	1 0 0	150,000	Griql'd. W.	6, Drapers Gardens
,, Chimes...... G	1 3/16 1 5/16	1 1/4 1 3/8	1 0	1/- Mar. 27 '96	1 0 0	100,000	Rand.........	8, Old Jewry, E.O
,, Comet	2 3/4 3	2 5/8 2 7/8	1 0	—	1 0 0	175,000	Heidelburg	Winchester-house.
,, Crœsus...... G	1 3/8 1 5/8	1 5/16 1 7/16	1 0	rts Apr 17 '95	1 0 0	255,000	Langlaagte	120, Bishopsgt. st. Wn
,, Gordon......D	—	/3 /9	1 0	5% Dec. '89	1 0 0	404,344	Griqualand	110, Cannon-street.
,, Heriot ......G	9 1/4 9 1/2	9 1/4 9 1/2 xd	1 0	5/ July 30, '96	1 0 0	88,750	Rand.........	96, Gresham Ho EC
,, Jagersf. ...D	10 3/8 10 5/8	10 1/2 10 3/4	5 0	10/ Apr. 15 '96	5 0 0	200,000	Transvaal .	5, Copthall-buildings
,, Kleinfontein G	3 1/8 3 3/8	3 3 1/4	1 0	12 1/2 pc Mar. '95	1 0 0	82,500	Rand.........	Winchester House
,, Midas	1 7/8 2 1/8	1 5/8 1 7/8	1 0	rts. Jan. 16, '96	1 0 0	150,000	Mid'le Viel	120, Bishopsgt-st. W
,, Primrose ...G	5 1/8 5 3/8	5 1/4 5 1/2	1 0	5/ Feb. 13, '96	1 0 0	278,750	Rand.........	2, Draper's-gardens.
,, Rietfontein G	3 3/8 3 5/8	3 1/8 3 3/8	1 0	—	1 0 0	160,000	,,	Warnford-ct., E.C.
,, S. Augustine D	9/ 9/6	8/9 9/3	1 0	—	0 19 6	299,137	Griqu'ld W	30-1, St. Swithin's-l.
,, Spes Bona... G	1 1/8 1 3/8	1 3/8 1 1/2	1 0	—	1 0 0	113,701	Rand.........	24, N. John-st., L'pl
,, Steyn Estate	1 9/16 1 11/16	1 1/2 1 3/4	1 0	—	1 0 0	125,000	Heidelber	19 Bury Street EC

AFRICAN MINES—(*Continued*).

Name.	Closing Price, Aug. 14, 1896.	Closing Price, Aug. 7, 1896.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£					
Nigel .... G	3 1/2 3 3/4	3 3 1/4	1 0	rts Aug 10 '95	1 0 0	160,000	Rand.........	96, Gresham Ho., EC
,, Deep ......G	1 1/2 1 3/4	1 9/16 1 11/16	1 0	—	1 0 0	195,000	Heidelberg	8 Old Jewry.
North Charterland	5/- 7/-	5/ 7/	1 0	—	1 0 0	800,000	—	Winchester House
,, Randfontein	1 7/8 2 1/8	2 2 1/4	1 0	—	1 0 0	235,000	—	8, Princes street
Nourse Deep.........	5 5 1/4	4 3/4 5 1/4	1 0	—	1 0 0	375,000	Rand.........	120, Bishopgt.-st., Wn
Oceana	1 3/8 1 5/8	1 5/16 1 7/16	1 0	2/-Nov. 28 '95	1 0 0	357,400	Wtrbg Lyn	13, Austin Friars.
,, Develpmnt	1/2 3/4	1/2 3/4	1 0	—	1 0 0	50,000	Heldebrg.	,,
,, Minerals ...	9/16 11/16	9/16 11/16	1 0	—	1 0 0	500,000	,,	,,
Orange F.S.E. ....D	3 1/4 3 3/4	3 1/2 3 3/4	1 0	2/6 Apr., 29, 96	1 0 0	284,000	Orange F.S.	10, Moorgate-street.
Orion (New).... .G	1 1/8 1 1/2	1 1/8 1 3/8	1 0	10% Aug. '95	1 0 0	30,000	Rand.........	8, Old Jewry.
Paarl Central ... G	1 1/16 1 3/16	1 1/16 1 3/16	1 0	—	1 0 0	138,750	Transvaal .	120, Bishopsgt st. Wn
Pardy's Mozambq.	1 1 1/4	1 1 1/4	10/	rts Mar 12 '96	0 10 0	60,000	S.E. Africa	Broad St. Avenue.
Piggs Peak ...... G	1/2 5/8	9/16 11/16	1 0	—	0 19 0	200,000	Swazielnd.	4, Sun Court.
Porges Randfontn.	1 3/8 1 1/2	1 5/16 1 7/16	1 0	2/ Feb. 13 '96	1 0 0	457,500	Rand.........	1, Bank Buildings
Potchefstroom... G	1/4 3/8	7/16 9/16	1 0	—	1 0 0	389,750	Potchefst...	19, Bury-st., E.C.
Princess Estate G	2 5/8 2 7/8	2 5/8 2 3/4	1 0	—	1 0 0	125,000	Rand.........	33, Cornhill. E.C.
Rand Central Ore	1 5/8 1 7/8	1 5/8 1 7/8	1 0	25 p c Aug. 95	1 0 0	115,000	—	8, Princes-street, E.C
Randfontein ......G	2 13/16 2 15/16	2 1/2 2 5/8	1 0	xr June 12 96	1 0 0	2,000,000	Rand.........	1, Bank Buildings.
Rand Mines ...... G	29 1/2 30	28 3/4 29 1/4	1 0	—	1 0 0	332,798	,,	120, Bishopsgt st. Wn‡
Rand-Rhodesia Ex	7/8 1	13/16 15/16	1 0	10 p.c. Oct. '95	1 0 0	25,000	R&Rhodesa	123, ,,
Rhodesia Ex & Dv.	5 1/4 5 3/4	5 5 1/2	0	—	1 0 0	50,000	Mt & Mash'l	15 & 16, Geo. St. EC
Robinson (SA) Bank	6 6	6 6 1/8	4 0	4/ Apl. 15, 96	4 0 0	750,000	—	8, Prince's-street
,, Deep......	8 3/4 9 1/4	9 9 1/4	1 0	—	1 0 0	500,000	M'nR'fR'nd	120, Bishopsgate st.
,, Diamond	1 1/4 1 1/2	1 1/4 1 1/2	1 0	—	1 0 0	350,000	Kaal Valley	8, Prince's street
,, Gold......	8 3/4 9	8 5/8 8 7/8	5 0	5/ July 30 '96	5 0 0	550,000	M. Rf.'rand	28, Austin Friars
,, Randftn.	1 1 1/8	1 1 1/8	1 0	—	1 0 0	517,000	Rand.........	8, Prince's-street.
Roodepoort Deep	2 3/8 2 5/8	2 3/8 2 5/8	1 0	—	1 0 0	170,000	,,	8, Old Jewry, E.C.
Roodepoort Un. G	5 5 1/8	4 3/4 5 xd	1 0	2/ July 30 '96	1 0 0	130,000	,,	Warnford-court.‡
Rose Deep............	5 5 1/4	5 5 1/4	1 0	—	1 0 0	300,000	M. Rf.'rand	30-31, S. Switn's. lane
Rothery Block......	8/ 10/	8/ 10/	1 0	—	—	—	—	55, Bishopsgate st.
Sacke Estates	1 1/8 1 1/4	1 1/8 1 3/8	1 0	2/ June 12 '96	1 0 0	225,000	—	19, Bury Street.
St. Helen's Devel.	2 1/4 2 1/2 nom	2 1/4 2 1/2 nom	1 0	—	1 0 0	47,950	S. Africa ...	13, S. Helen's Place.
Salisbury New ...	3 7/8 4 1/8	3 7/8 4 1/8	1 0	—	1 0 0	99,000	Rand.........	96, Gresham Ho., EC
Sheba ....G	2 2 1/16	1 15/16 2 1/16	1 0	1/- June26 '96	1 0 0	850,000	Lydenburg	16, S. Helen's place.
Simmer & Jack...G	5 6	5 6	5 0	2/ Aug 14 95	5 0 0	940,000	Rand......	8, Old Jewry.
S.A Gold Trust New	7 1/2 8	7 1/8 7 3/8	1 0	7/6 Jun 26 '96	1 0 0	250,000	S. Africa ...	,,
South West Rand	1/4 3/8	1/4 3/8	1 0	—	1 0 0	158,000	Rand.........	Winchester House.
Spitzkop (New) G	1 1/8 1 1/4	1 1/8 1 1/4	1 0	—	1 0 0	99,070	Lydenburg	15, Bishopsgt-st, Wt.
Stanhope ....G	1 1/16 1 3/16	1 1 1/8	1 0	2/- Oct 20 '95	1 0 0	34,000	Rand... ...	96, Gresham Ho., EC
Sutherland R. ...G	/6 1/6	/6 1/6	1 0	—	1 0 0	220,000	Zoutpan'bg	Dashwood Ho.
Tati Concessions ...	1 1/4 1 7/8	1 1/4 1 3/8	1 0	rts Jy, 22 '95	1 0 0	392,000	—	Gresham House.
Trans. Coal Trust...	1 1/8 1 3/8	1 1/8 1 3/8	1 0	1/-Apr. 29, 96	1 0 0	439,985	Rand... ...	Broad-st. House, EC
,, Consolidatd	1 3/4 2	1 3/4 2	1 0	—	1 0 0	485,131	Transvaal	120, Bishopsgte st Wn
,, Est. & Dev.	13/16 1 1/16	15/16 1 1/16	1 0	—	1 0 0	428,600	,,	10, New Broad-st. EC
,, Gold Fields	3 1/8 3 1/2	3 1/4 3 1/2	1 0	8/- Apr. 15 '96	1 0 0	135,000	S. A. R.......	120, Bishopsgt.-st. Wn
,, Land...... ...	1/4 3/8	1/4 3/8	1 0	—	1 0 0	79,915	Transvaal .	15, Abchurch Lane.
Treasury............G	2 1/2 3	2 1/2 3	4 0	12 1/2% Sep.'91	4 0 0	135,000	Rand.........	Warnford Court.
United Exploratn.	1 1 1/4	1 1 1/4	1 0	—	1 0 0	250,000	—	120, Bishopsgte St.
,, Ivy Reef......G	1 1/16 1 3/16	1 1/8 1 1/4	1 0	/6 June 26 '96	1 0 0	45,000	Transvaal .	110, Cannon-street.
,, Langlaagte (N) G	7/8 1 1/8	7/8 1 1/8	1 0	—	1 0 0	146,000	Rand.........	85, Gresham Ho., EC
,, Mines Bultf. D	1 1/8 1 3/8 nom	1 1/8 1 3/8 nom	1 0	—	1 0 0	115,000	Kimberley	120, Bishopsgate St.
,, Pioneer.........	3/8 5/8	3/8 5/8	1 0	—	1 0 0	75,000	De Kaap ...	16, S. Helen's-pl., EC
Van Ryn .... G	4 3/4 5	4 3/4 4 7/8	1 0	4/- Jan. 16	1 0 0	160,000	Rand.........	18, St. Swithin's-ln.
,, North ...	1/2 3/4	1/2 3/4	1 0	—	1 0 0	116,091	—	,,
,, West......	2 2 1/4	2 1/4 2 1/2	1 0	—	1 0 0	120,000	Rand	,,
Venterskroon	1 3/8 1 1/2	3/4 1	—	—	1 0 0	125,000	Rooderand	8, Old Jewry
Vesta	7/8 1 1/8	7/8 1 1/8	1 0	—	1 0 0	130,000	Rand	Winchester House
Village Main Reef	5 3/4 6	5 5/8 5 7/8	1 0	rts June 26' 96	1 0 0	177,000	,,	8, Old Jewry.
Vogelstruis Estate	4 1/8 4 3/8	4 1/8 4 3/8	1 0	—	1 0 0	200,000	,,	Winchester House.
,, Cons. Deep ...	2 3/4 3	2 2 1/4	1 0	—	1 0 0	327,750	,,	16, Geo. St. Mn. Ho.
Wassau ....G	1 1 1/8	7/8 1	1 0	—	1 0 0	100,000	Gold Coast	147, Cannon-street
Wemmer ....G	8 5/8 8 7/8	8 5/8 8 7/8	1 0	10/ Apr. 29 96	1 0 0	55,000	Rand.........	19, Bury-street.‡†
Western Nigel......	5/8 7/8	5/8 7/8	1 0	—	1 0 0	207,000	Main Reef	Suffolk House.
West Rand.........G	2 1/4 2 3/8	2 2 1/4	1 0	—	1 0 0	240,000	Rand.........	13, Geo. St., Mans. Ho.
Willoughby's Con.	1 13/16 1 15/16	1 7/16 1 9/16	1 0	—	1 0 0	700,000	Mashonald	3, Copthall-bldgs.
Witwatersrand G	6 1/2 6 3/4	6 1/2 6 3/4	1 0	—	1 0 0	250,000	Rand.........	19, Bury-st., E.C.
Wolhuter ....G	6 5/8 6 7/8	6 5/8 6 7/8	1 0	rts Apr 26 '94	1 0 0	130,000	,,	Warnford-court.†
Worcester ....G	4 1/4 4 1/2	4 1/4 4 1/2	1 0	3/- June 12 '96	1 0 0	90,727	Rand.........	8, Old Jewry.‡
Zambesia Explora.	2 3/8 2 5/8	2 3/8 2 5/8	1 0	—	1 0 0	65,000	Transvaal .	30-31, Clement's lane

BRITISH MINES.

Name.	Closing Price, Aug. 14, 1896.	Closing Price, Aug. 7, 1896.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£		£ s. d.	£		
Basset	3/4 7/8	16/ 17/	1 0	—	1 0 0	65,000	Cornwall	Redruth.
Blue Hills .....CT	1/ 2/	1/ 1/6	*	2/- May, '81	6 19 5	5,353	,,	Camborne.
Carn Brea & Tinct T	1/4 1/2	1/ 2/	1 0	2/6 Dec.,'93	22 8 5	—	,,	Carn Brea.
Devon Gawton CA	15/ 20/	7/8 1	1 0	—	0 12 6	25,000	Tavistock	8, Finsbury circus.
,, Gt Cons. CA	18/ 19/	19/ 20/	6 0	1/6 May '95	2 0 0	10,240	Devon ...	,,
Dolcoath ....T	18/ 20/	18/ 20/	1 0	—	1 0 0	188,000	Cornwall	Camborne.
,, ...	5/ 6/	5/ 7/	1 0	—	0 7 6	25,000	,,	,,
Drakewalls CTM	/3 /6	/3 /6	5/	—	0 2 0	61,856	,,	Dashwood House.
East Pool ......AT	2 2 1/8	2 2 1/8	*	1/6 Sept. '94	0 9 9	8,400	Cornwall	Illogan.
Great Laxey......L	1 1/4 1 3/8	2 1/4 2 3/4	4 0	5/- Apr., '92	4 0 0	15,000	I. of Man	Gresham House.
Halkyn	10 11	10 11	1 0	2/6 June 26'96	1 0 0	10,000	Flint	Chester.
Isle of Man L	6 3/4 6 1/4	6 1/4 6 3/4	5 0	3/- June '96	5 0 0	11,000	I. of Man	,,
Killifreth ....T	5/ 6/	3/4 7/8	*	11/6 Nov.,'94	5 15 6	6,000	Cornwall	Truro.
Leadhills L	1 1 1/8	1 1 1/8	6 0	1/- Oct. 16 '95	6 0 0	20,000	Lanarksh.	30, Finsbury-circus.
Levant ....CT	4 4 1/4	3 3/4 4	*	4/- Nov., '94	11 9 6	2,500	Cornwall	Penzance.
Polberro ....T	1/4 3/8	1/4 1/2	*	—	2 1 5	18,000	S. Agnes, Cl.	37, Walbrook.
So. Condurrow TC	1/ 2/	1/2 3/4	*	3/6 Apr. '93	7 17 6	6,123	Cornwall	20, Great St. Helens
,, Crofty TA	1/ 2/	5/8 7/8	*	—	17 10 6	5,769	,,	Pool, Cornwall.
Weardale L	5/9	—	4 0	1/3 Oct. '90	1 10 0	60,000	Durham...	3, Lombard-court.
West Kitty ......T	2 1/4 2 3/4	2 2 1/8	*	2/- Dec. '94	1 2 0	6,000	Cornwall	37, Walbrook.
Wheal Agar . TA	—	—	*	2/6 Aug. '88	23 15 2	6,000	,,	Redruth.
,, Friendly..T	1/ 1/6	1/ 1/6	*	—	0 12 9	10,000	,,	2, Copthall Bldgs. E.C
,, Grenville T	6 6 1/2	5 1/2 6	*	3/- Nov 28 '95	18 2 0	6,000	,,	7, Union-court, E.C.
,, Kitty.......T	5/ 6/	4/ 5/	*	3/- Mar. '88	4 5 6	8,590	,,	Truro.
,, Metal & F. T	3/5 4/	3/6 4/	*	—	0 3 0	60,000	,,	14 Broad-street Av.

INDIAN AND ASIATIC MINES.

Name.	Closing Price, Aug. 14, 1896.	Closing Price, Aug. 7, 1896.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Balaghat Mysore G	3/ 3/6	3/ 3/6	1 0	—	1 0 0	160,000	India	6-7, Queen-street-pl.
Burma Ruby......R	11/16 13/16	9/16 11/16	1 0	—	0 18 0	298,370	Burmah...	Suffolk House, E.C.
Champion Reef...G	7 11/16 7 13/16 x	7 7/8 8	1 0	4/6 Aug. 13 '96	1 0 0	211,645	India	6-7, Queen-street-pl.
Colar Central ...G	1/ 1/6	1/- 1/6	1 0	—	1 0 0	200,000	,,	Dashwood Ho., E.C.‡
Coromandel...... G	2 1/16 2 3/16	2 1/8	1 0	—	1 0 0	120,000	,,	6-7, Queen-st.-place
GoldFlds Mysore G	1 1/16 1 1/4	23/6 24/6	1 0	2/- Feb '96	1 0 0	220,000	,,	6-7, Queen-street pl.
Kadur Mysore......	6/ 7/	6/6 7/	5/	—	0 5 0	400,000	,,	Copthall House, E.C
Kempinkote Gd Fd	1/3 1/9	1/ 1/6	5/	—	0 4 0	575,316	India	6-7, Queen-st.-place
Mysore .... G	8 1/16 8 3/16	8 1/16 8 3/16	1 0	6/ June 26 '96	1 0 0	248,354	,,	6-7, Queen-street pl.
My. Harnhalli ...G	/6 1/	-/6 1/	1 0	—	0 18 6	100,007	,,	2, East India Avenue
,, Reefs ...G	9/ 10/	8/ 9/	1 0	—	0 19 6	169,000	,,	6-7, Queen-street-pl.
,, West (N) G	13/16 15/16	5/8 7/8	1 0	rts. Jan. 16 '96	0 19 6	127,402	,,	2, Gt. Winchester St.
,, Wynaad G	13/16 15/16	5/8 7/8	1 0	rts. Jan. 16 '96	0 19 6	125,000	,,	,,
Nine Reefs ......G	6/ 7/	6/ 7/	10/	—	0 3 6	250,000	,,	6-7, Queen-street-pl.
Nundydroog......G	3 1/8 3 3/8	3 9/16 3 11/16	1 0	2/- June 26 '96	1 0 0	200,000	,,	,,
Ooregum (Dl.O.) G	3 1/4 3 3/8	3 5/16 3 7/16	1 0	2/ July 15 '96	1 0 0	145,000	,,	,,
,, (10% Pref.).	3 7/8 4 1/8	3 7/8 4 1/8	1 0	4/ July 15 '96	1 0 0	107,011	,,	,,
,, (10% Pref.).	3 1/8 3 3/8	3 1/8 3 3/8	1 0	4/ July 15 '96	0 5 0	12,989	,,	,,
Pahang Kabang T	1/16 3/16	1/16 3/16	1 0	—	1 0 0	200,000	Malay Pn.	4a, Jeffrey's st. E.C
,, Corp........	4/ 6/	4/ 6/	—	—	—	—	—	
Yerrakonda ......G	1/3 1/9	1/6 2/	4/	—	0 5 0	137,491	Mysore ...	6-7 Queen-street pl.

"THE MINING JOURNAL" SHARE LIST—(Continued)

AUSTRALIAN AND NEW ZEALAND MINES.

Name.	Closing Price, Aug. 14, 1896	Closing Price, Aug. 7, 1896.	Am't. of Share	When last XD and Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Achilles Gld Fld.	1/9 2/3	2/6 3/	2/6	—	0 2 6	642,456	Otago, N.Z	11, Poultry.
Aladdins Lamp G	2⅛ 2⅜	1⅞ 2	1 0	2/ July 15 '96	1 0 0	100,000	L'knN.S.W	4-6, Throg. Avenue.
Anglo-Cont. Corp.	1¼ 1⅜	1¼ 1⅜	1 0	100% '95	1 0 0	125,000	—	Worcester House.
„ French Exp	1⅛ 1⅜pm	⅞ 1⅛pm	1 0	5/- Oct 30 '95	0 10 0	40,000	W. Austral	3, Princes Street.
„ Ger.Explor.	1 5/16 1 7/16pm	1⅜ 1½pm	1 0	5/ Oct. 30 '95	0 10 0	40,000	„	„
Aroha ...G	1¼ 1⅜	1 5/16 1 7/16	1 0	—	1 0 0	100,000	N. Zealand	30, S. Swithin's Lane
Arrow BrownhillG	¾ ⅞	¾ ⅞	1 0	—	1 0 0	30,007	Cool., W.A.	4, Gt. Winchester St.
Assoc. Gold Mines	3⅜ 3½	3 5/16 3 7/16	1 0	bo June 26 '96	1 0 0	375,006	„	20, Bucklersbury
Australasian ...G	3/3 3/9	3/6 4/	1 0	-/6 Mar., '92	1 0 0	10,000	Gymp.Q'ld	6, Queen-st. place
Australian ...C	—	—	20 0	1/-July 30 '96	7 7 6	218,315	S. Austral.	42, New Broad-street
Aus. Bro. Hill Con.	1/3 1/9	1/3 1/9	1 0	1/- June, '91	0 19 3	574,799	BnrR.NSW	Winchester House.
Baker's Creek ...G	⅜ ⅝	⅜ ⅝	1 0	1/- May '95	0 17 6	509,000	H'gveNSW	Hillgrove, N.S.Wales
Bamboo Queen & R	¾ 1	¾ 1	1 0	—	1 0 0	—	Pilb., W.A	38, Coleman Street.
Bayley's Reward G	5/6 6/	4/9 5/3	1 0	-/4 Dec. 94	1 0 0	480,000	Coolgardie	Feb'y. H. St'mf'ld St.
Big Blow ...G	6/6 7/6	4/ 5/	1 0	—	1 0 0	150,000		15, Cannon Street.
Black Flag Consld.	1 13/16 2 1/16	2 2⅛	1 0	—	1 0 0	140,000	Coolgardie	4, Bishopsgate St Wn
„ Propty.	⅝ 13/16	⅝ ⅞	1 0	—	1 0 0	400,000	Coolgardie	1, Metal Exch. Bldgs
Blagroves Freehld	3/ 3/6	3/ 3/6	2/6	—	0 2 6	500,000	Grom. N.Z	Dashwood House.
Blue Spur and G.G	10/ 11/-	10/- 11/-	1 0	—	1 0 0	82,298	Otago, N.Z.	6-8, Great St. Helen's
Bonnie Dundee G	8/6 9/6	8/- 9/-	1 0	—	0 19 0	120,000	C.T.Q'land	16, S. Helen's Place
Brilliant...G	13/16 15/16	13/16 15/16	2 0	/4 June 24, '96	2 0 0	250,000	„	Charters Towers.
„ Block...G	1 1/16 1 3/16	1 1/16 1 3/16	1 0	-/6 Dec. 16 '95	1 0 0	70,000	„	16, S. Helen's Place
„ St.Geo.G	1⅜ 1⅝	1⅜ 1⅝	10/	-/6 July 8 '96	0 10 0	72,000	„	Charters Towers.
Brit. Brok. Hill S	⅞ 1	⅞ 1	1 0	—	1 0 0	240,000	N.S. Wales	Dashwood Ho., E.C.
Broad Arrow ...	2/ 3/	2/ 3/	5/	—	0 5 0	400,000	W.Feather	57, Moorgate Street.
Broken Hill Prop. S	2 7/16 2 9/16	2⅜ 2⅝	8/	1/- Jun. 26 '96	0 8 0	960,000	N. S.Wales	3, Gt. Winchester st.
Brownhill Propty.	9/16 11/16	7/16 9/16	1 0	—	1 0 0	67,500	Hannan's	4, Gt. Winchester st
Burbank's Birthd'y	1 13/16 1 15/16	1⅝ 1⅞	1 0	—	1 0 0	150,000	Coolgardie	Copthall House.
Cassidy Hill ...G	¾ ⅞	13/16 15/16	1 0	—	1 0 0	115,000	Coolgardie	9 10, King Street, E.
Central Boulder G	⅜ ⅝	⅜ ⅝	1 0	—	1 0 0	93,522	K'lg'rl, WA	Worc'st'r Ho., Walbr'k
„ Exp. & Invst.	5/16 3/16 dis	5/16 3/16 dis	1 0	4'6d Mar 12'96	1 0 0	200,000	W. Austra.	1, Met. Exchg. Bldgs
„ „ of W.A.	1 1⅛	1 1⅛	1 0	1/7½Mar 27 96	1 0 0	122,000	W. Austral	2, „
Charters Tow. ...G	1/3 1/9	1/3 1/9	10/	—	0 8 6	200,000	Queensland	110, Cannon Street
Colonial Finance...	3⅝ 4⅛ pm	3⅝ 4⅛pm	1 0	10/ Mar. 27 '96	0 10 0	21,140	W. Austra.	139 „
„ Gold Fields	⅞ 1⅛pm	⅞ 1⅛pm	1 0	—	0 12 6	75,250	„	7½, Cornhill.
Con. G. M. of W. A.	¾ ⅞	5/16 7/16	1 0	—	1 0 0	246,779	Pilbarra ..	30, Moorgate Street.
„ Murchison ...	⅝ ¾	⅝ ⅞	1 0	—	1 0 0	225,533	Murc., W A	Broad Street House.
Contl. & W.A. Trust	1 1⅛	1 1⅛	1 0	—	1 0 0	104,467	W. Austra	Broad Street House
Coolgardie Gold ...	1 1⅛	1 1⅛	10/	x.rts.Jun12'96	0 5 0	90,009	Cool.W.A.	Broad Street Avenue
„ Mint & I.Ex.	1 13/16 2 1/16	1⅝ 1⅞	1 0	—	1 0 0	150,000	„	30, S. Swithin's ln.
Craven' Col. ... G	1/6 2/	1/6 2/6	8/	-/3 June 94	0 4 8	100,000	Queensland	30-1, S. Swithin's-ln
Croesus So. United	1 11/16 1 13/16	1⅝ 1⅞	1 0	—	1 0 0	115,000	Hann'sWA	Blomfield House
Crown United......	1½ 1⅝	1½ 1⅝	1 0	—	1 0 0	75,000	—	110, Cannon-st., E.C.
Cumbriand (New)G	/3 /9	/3 /9	1 0	2/6 Dec. '87	0 19 0	184,290	Queensland	Blomfield House. E.C
DayDawn B.&W.G	15/ 16/	15/ 16/	1 0	-/6 June 12 '96	1 0 0	498,400	„	16, S. Helen's Place
„ P. C. G	3/3 3/9	3/6 4/	1 0	-/6 Apr. '92	1 0 0	490,000	„	Winchester Ho., E.C
Eaglehawk...G	1/ 1/6	1/ 1/6	1 0	—	0 18 0	120,000	Victoria ..	71-72, King Wm. St.
Eagle's Nest...	⅞ 1	⅞ 1	1 0	—	1 0 0	2,500	Mt.Margt	Finsbury House.
Explorers Synd. ...	5/16 7/16 pm	5/16 7/16 pm	1 0	2/6 April 29'96	1 0 0	9,000	W.Austral	Copthall House
Fingall R'fs. Extd	5/16 7/16	¼ ⅜	1 0	1/4 Jan. 16 '96	1 0 0	150,000	„	4, Sun Court
Florence...G	1⅝ 1⅞	1⅞ 2	1 0	—	1 0 0	90,000	„	15, St. Swithin's ln
Gibraltar Cons...	1⅝ 1¾	1⅝ 1¾	1 0	—	1 0 0	300,000	N S Wales	6, Queen street-place
Gladiator ...G	1 3/16 1 5/16	¾ 1	1 0	—	1 0 0	—	W. Austral	45, Threadneedle st
Glenrock ...G	1/3 1/9	1/3 1/9	1 0	—	0 8 0	225,000	N.Zealand	3-5, Queen-st. E.C.
Golden Cement G	13/16 15/16	16/9 17/3	1 0	—	1 0 0	175,000	W.Austral	3, Princes Street, EC
„ Crown... G	2 5/16 2 9/16	2 5/16 2 9/16	1 0	—	1 0 0	100,000	„	54, Old Broad Street
„ Gate...G	/6 1/6	/6 1/6	10/	—	0 10 0	150,000	Queensland	34-36, Gresham-st
„ Horse Shoe...	1⅞ 2	2⅛ 2¼	1 0	—	1 0 0	—	W.Austra.	11, Helen's Place
„ Link...G	1 5/16 1 9/16	1 5/16 1 9/16	1 0	5/- Oct 30' 95	1 0 0	90,000	„	9 10, King Street, E.C
„ Plum...G	¾ ⅞	13/16 15/16	1 0	—	1 0 0	120,000	„	4, Bishopsgate Street
Gold Estates...	5/16 7/16	⅜ ⅝	1 0	3/ June 12 '96	1 0 0	60,000	„	20, Bishopsgte-st Wn
Great Boulder ...G	7 1/16 7 3/16	7 5/16 7 11/16	1 0	4/&rtsJn.12,96	1 0 0	240,000	Yilgarn ..	3, Gracechurch st.
„ „ Junction	1 5/16 1 7/16	1 3/16 1 5/16	—	—	—	—	„	Worc. Ho., Walbrook
„ „ M'n R'fs	1⅝ 1⅞	1 5/16 1 11/16	10/	—	0 10 0	240,000	—	3, Princes Street.
„ Fingall Rfs.	¾ ⅝	9/16 11/16	1 0	5% Jan. 16, 96	1 0 0	175,000	Kurnalpi	Broad Street House
Gresham Synd. ..	⅛dis ⅛pm	⅛ ⅛ pm	1 0	4/ &bo.Jun12'96	1 0 0	50,000	W. Austral	13-14, Abchurch ln.
Hainault ...	2⅞ 3	3 3⅛	—	—	—	—	—	82, Gordon st., Glas.
HamptonGoldFlds	⅞ 1	⅞ 1	1 0	—	0 10 0	—	—	9, S. Mildred's Ct
„ GoldHill	1/9 2/3	1/9 2/3	1 0	—	—	—	—	93-94, Gracechurch st
„ Plains...	4⅜ 4⅝	4 11/16 4 13/16	1 0	rts May 14 '96	1 0 0	300,000	Cool. W.A.	29, S. Swithin's lane
„ PlainsEx	5/6 6/6	6/6 7/6	1 0	—	0 18 0	160,000		Suffolk House, E.C
Hannan's BrwnHl	6 5/16 6 9/16	6 5/16 6 9/16	1 0	—	1 0 0	65,000	„	Broad Street House
„ Devel'pm'nt	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	147,000		5, Moorgate-st. bldgs
„ Main Reef...	11/9 12/3	12/ 13/	10/	—	0 10 0	—	Klg.W.A.	15, St. Swithin's ln.
„ North...	1 3/16 1 5/16	1 1⅛	1 0	—	1 0 0	51,107	„	35, Cornhill.
„ 100 Acre...	⅞ 1	⅞ 1	1 0	—	—	—	„	Dashwood House.
„ Oroya...	1 5/16 1 9/16	1 7/16 1 9/16	1 0	—	1 0 0	—	„	2, Bucklersbury
„ Prop...	2 5/16 2 7/16	2⅜ 2⅝	1 0	—	0 10 0	—	—	1-9, Cannon Street.
„ Reward... G	3 5/16 3 9/16	3¼ 3⅜	1 0	—	1 0 0	70,000	Hann. W A	Bartholomew Ho.
„ Star...	1 7/16 1 9/16	1⅜ 1⅝	1 0	—	1 0 0	—	E.Coolgde.	Finsbury House E.C
Hauraki...G	18/ 19/	18/ 19/	2/6	rts Aug. 13 '96	0 2 6	250,000	Coromndl.	Dashwood Ho., E.C
Hit or Miss ...	2⅛ 2⅜	2⅛ 2⅜	1 0	—	1 0 0	120,000	Cool., W.A.	1, Queen Vic St.
Idaho ...GS	4/6 5/	4/6 5/	5/	-/6 Jan. 16 '96	0 4 8	142,429	W. Austra	Copthall House.
Kabounga ...G	/6 1/	/6 1/	10/	—	0 9 9	249,256	Queensland	70-71, Bishopsgate st
Kalgurli...	1 13/16 1 15/16	2 2⅛	1 0	—	1 0 0	34,000	W. Austral	50, Threadneedle-st
Kapanga...G	13/ 14/	13/ 14/	1 0	rts May 24 '95	0 19 6	249,760	N.Zealand	9, New Broad-street
Kathleen ...	3/9 4/3	3/9 4/3	2/6	—	0 2 6	600,000	Ha'raki, NZ	Dashwood House
„ Crown ...	2/3 2/9	2/3 2/9	2/6	—	0 2 6	164,258	„	„ „
Kintore ...G	⅛ ⅛ dis	⅛ ⅛ dis	1 0	—	0 15 0	44,003	W. Austra	3, Abchurch lane.
Komata Reefs ...	10/9 11/3	10/6 11/	5/-	—	0 5 0	—	Ha'raki, NZ	Dashwood House.
Kurnalpi... G	5/ 6/	5/ 6/	1 0	—	—	—	Coolgardie	Throgmorton House
Lady Loch...	3⅛ 3⅜	3 5/16 3 7/16	1 0	—	1 0 0	70,000	„	34-36, Gresham-st.
„ Mary Amalg.	⅛ ⅜	⅛ ⅜	1 0	—	1 0 0	46,000	Murchison	Finsbury House.
„ Shenton ...	2⅞ 2⅜	2⅝ 2⅞	1 0	—	1 0 0	—	—	13, St. Swithin's ln
Limerick ...	⅝ ¾	⅝ ¾	1 0	—	1 0 0	52,527	Coolgardie	Leadenhal Bulldgs.
Ln. & Con. Invest.	⅛ ¼ pm	⅛ ¼ pm	1 0	—	1 0 0	500,000	W. Austra	7½, Queen Street.
Lon. & Globe Fin.	4⅛ 4⅜	4⅛ 4⅜	1 0	rts Mar. 27 '96	1 0 0	150,000	„	15, Austin Friars.
Londonderry...G	2/6 3/6	3/6 4/6	1 0	—	1 0 0	467,000	„	8, Gracechurch st.
L.&W. Aust. Expl.	1⅛ 1¼	1 9/16 1 11/16	1 0	4/-Nov 29 '94	1 0 0	270,100	„	Broad Street Ho.
Lon. W. A. Invest.	2¼ 2⅜ xd	2 1/16 2 3/16	1 0	1/ Aug 13 '96	1 0 0	100,000	„	„
Mainland Cons. G	3 5/16 3 7/16	3 5/16 3 7/16	1 0	—	1 0 0	150,000	Murchison	24 Old Broad Street
Mawson's Rewrd.G	1 5/16 1 7/16	1 5/16 1 7/16	1 0	—	1 0 0	60,000	„	28 & 29, S Swithin's ln
Menzies Gold Est.	⅝ ¾	13/16 15/16	1 0	—	1 0 0	—	„	Broad Street House
„ Gold Reef	1 5/16 1 7/16	1 5/16 1 7/16	1 0	2/ June 26, '96	1 0 0	175,000	„	24, Old Broad Street
„ (O'Driscoll)	1 5/16 1 7/16	1 1/16 1 3/16	1 0	—	1 0 0	—	„	16, Tokenhouse Yard
Mills'Day DawnG	9/16 11/16	9/16 11/16	1 0	-/6 Aug 29 '95	0 15 6	300,000	Queensland	16, S. Helen's Place
Mosman...G	2/6 3/	2/6 3/	1 0	—	0 19 0	135,000	N.S. Wales	Bishopsgate House
Mount Lyell...	8⅛ 8⅜	7⅞ 8⅛	3 0	rts June 26, '96	3 0 0	300,000	Tasmania	Finsbury House
Mount Margaret...	1⅝ 1⅞	1⅞ 2	1 0	—	1 0 0	—	W. Austral	23, St. Swithin's ln.
„ Morgan G	3⅜ 3⅝ xd	3⅜ 3⅝	1 0	-/6 Aug 13, '96	0 17 6	1,000,000	Queensland	9, Gracechurch-st.
„ Rowe ...	⅞ 1	⅞ 1	1 0	—	1 0 0	75,000	Coolgardie	44, Coleman Street
MurchisonN,Ch'm	7/ 7/6	8/ 8/6	1 0	1/- Oct 30 '95	1 0 0	160,000	„	23, College Hill.
N'eHauraki Props	3/6 4/	3/6 4/	5/	—	0 5 0	200,000	Ha'raki, NZ	Dashwood House.
„ Queen ...G	5/3 5/9	5/6 6/	1 0	-/6 Sep 12 '95	0 19 6	158,915	Queensland	71 72, King Wm. St.
Norseman ...	1⅛ 1¼	1⅝ 1¾	1 0	—	1 0 0	200,000	Dundas ..	3, S. Swithin's lane
North Boulder...	1 5/16 1 11/16	1⅝ 1⅞	10/-	rts July 15, '96	0 10 0	—	W. Austra	15, Helen's Place
„ Coolgardie ...	/6 1/	/9 1/3	5/	—	0 4 0	400,000	Pilbarra ..	226, Winchester Ho.
„ Kalgurli ...	13/16 15/16	¾ 1	1 0	—	1 0 0	—	—	11, Abchurch lane
„ Q'ld. & Agency	1⅛ 1⅜	1¼ 1⅜	1 0	30% Aug. '95	1 0 0	90,000	Queensland	10 New Broad Street
Omnium G M Assoc	⅝ ⅞	⅝ ⅞	1 0	—	1 0 0	80,000	—	Broad-street House
Paddington Cons.	1⅞ 2	1⅞ 2	1 0	—	1 0 0	75,000	W. Feather	77, Bishopsgate-st.
Pambula ...	1 1 1/16	1 1 1/16	1 0	—	—	120,000	N. S. Wales	45-46, Broad St. Av'e
Pilbarra G. F. ...	¾ ⅞	¾ ⅞	1 0	2/ May 14, '96	1 0 0	100,000	Pilb, W. A	38, Coleman-street.
Ramage Syndicate	4⅛ 4⅜	4⅛ 4⅜	1 0	£3&rts F.13'96	1 0 0	50,000	W. Austra	4, Bishopsgate-st.
Royal Oak ...	3/ 3/6	3/ 3/6	5/	—	0 5 0	200,000	N. Zealand	Dashwood House.
„ Sovereign ...	3¼ 3⅜	3¼ 3⅜	1 0	—	1 0 0	60,000	Coolgardie	8, Old Jewry, E.C.
Sherlaws ...	10/ 11/	10/ 11/	1 0	—	1 0 0	85,000	„	Broad Street Avenue
ScottishAustralian	⅜ ⅝	⅜ ⅝	1 0	-/3 Aug., '95	1 10 0	200,00	N. S. Wales	Winchester Ho. E.C.
Scotty's Hauraki...	3/3 3/9	3/ 3/6	6/-	—	0 5 0	400,000	N. Zealand	5, Drapers gardens
South Kalgurli ..	1⅛ 1⅜	1⅛ 1⅜	1 0	—	1 0 0	60,000	W. Austra	2, Great Win. St.
Stony Shot & Excl	⅝ ⅞	5/16 7/16	2/6	—	1 10 0	—	Pilb., W A	30, S. Swithin's lane
Success ...	3/9 4/3	4/3 4/9	2/6	—	0 2 6	238,000	Coro. N. Z	Dashwood House.
Tairua ... Estate	3 3¼	2 11/16 2 13/16	1 0	—	1 0 0	125,200	Nelson, N.Z	9, S. Mildred's Court
Tararu...	7/6 8/6	7/ 8/	10/	—	0 0 0	90,000	N. Zealand	Dashwood House.
Tokatea of Hauraki	2/9 3/3	3/3 3/9	5/	—	0 5 0	—	„	63, New Broad St.
Town Prop. of W A	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	250,000	W. Austra	28-9, S. Swithin's-ln
True Blue ...	⅞ 1	⅞ 1	1 0	—	1 0 0	—	„	Dashwood House.
Victory (C.T.)...G	4/6 5/6 xd	4/6 5/6	6/	/6 Aug 13, '96	0 3 4	0,000	Queensland	32, Gresham-st., E.C
Waihi... G	6⅝ 6⅞	6⅝ 6⅞	5/	2/-June 12, '96	1 0 0	161,000	N. Zealand	11, Abchurch-ln. E.C
„ Silverton ...	2⅛ 2⅜	2⅛ 2⅜	1 0	—	1 0 0	60,000	„	23, College Hill
Waitekauri ...	5⅝ 5⅞	5⅝ 5⅞	1 0	—	1 0 0	136,000	„	„
„ Extended ...	10/ 11/	10/ 11/	10/	—	0 10 0	100,000	„	63, New Broad St.
Waiotahi...G	10/ 11/	8/6 9/6	10/	—	0 10 0	100,000	Orydn, N Z	43, Threadneedle st
Water Trust Min.	⅜ ⅝	⅜ ⅝	1 0	—	1 0 0	120,000	W. Austral	Broad Street House
W. of Nations...	1 3/16 1 5/16	1 3/16 1 5/16	1 0	—	0 15 0	—	—	77, Bishopsgate-st.
Wentworth ...G	⅞ 1	⅞ 1	1 0	1/- Apl 16 '96	1 0 0	600,000	N. S Wales	4-6, Throgmort. Av.
W. A. Develop's.	1 1⅛	¾ 1	1 0	rts May 14 '96	1 0 0	50,000	—	49-53, Moorgate court
W. Aust. G. Conces.	1 13/16 1 15/16	1⅛ 1⅜	1 0	2/ Sept. 27 '96	1 0 0	455,000	W. Austra	33, Old Broad st., EC.
W. A. Bnk & Fin.	4 5/16 4 9/16	4 1/16 4 5/16xd	1 0	rts Mar. 27, '96	1 0 0	300,000	„	54, „

AUSTRALIAN AND NEW ZEALAND MINES—(Continued).

Name.	Closing Price, Aug. 14, 1896	Closing Price, Aug 7, 1896.	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
W. Australian G.F.	9⅛ 9⅜	9⅛ 9⅜	1 0	6/- July 30 '96	1 0 0	65,000	Coolgardie	28-29, S. Swithin's-ln
„ „ Mines Dvl	1⅞ 2 pm	1⅞ 2 pm	1 0	10/ Oct 30, 95	1 0 0	40,000	W. Austral	3, Princes Street
„ Aust. Mining	8/- 8/6	8/ 8/6	5/	7½d. Mar. 27'96	0 5 0	320,000	„	157, Winchester Ho.
„ Aust. Pioneer.	2⅛ 2⅜pm	2⅛ 2⅜pm	1 0	10/ June 12 '96	1 0 0	19,993	„	139, Cannon-street.
„ „ Share Corp.	1 5/16 1 7/16 pm	1⅛ 1⅜pm	1 0	—	0 5 0	200,000	„	28, St. Swithin's ln
„ „ Venture...	2⅛ 2⅜pm	2⅛ 2⅜ pm	1 0	15/ Oct. 30 '95	1 0 0	—	„	3, Princes Street.
West Boulder ...	5/16 7/16	¾ ⅞	—	—	—	—	—	
White Feather ...	1⅞ 2⅛	1⅞ 2	1 0	—	1 0 0	60,000	Coolgardie	28 & 29, S. Swithin's ln
Zapopan ...G	1/6 2/-	—	1 0	—	1 0 0	25,000	N W Austra	70, Bishopsgate-street
Zeehan Montana S	—	—	1 0	-/4 Dec. 95	1 0 0	66,000	Tasmania	11, Queen Victoria st
„ „ ...	—	—	1 0	2½ Dec. 95	0 2 6	12,000	„	„

EUROPEAN MINES.

Name.	Closing Price, Aug. 14, 1896	Closing Price, Aug 7, 1896.	Am't. of Share £	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Ilamillos ...L	1¼ 1⅜	1¼ 1⅜	2 0	1/9 Apr 15 '96	2 0 0	35,000	Spain ...	6, Queen-street-place
Consett Ore ...	7⅛ 7⅜	7¼ 7⅜	1 0	5/- July 94	1 0 0	55,200	Spain ...	19, Grey-st, N'castle.
Fortuna ...L	¾ 1	¾ 1	2 0	1/- Apr 15 '96	2 0 0	25,000	Spain ...	
Libiola...C	2¾ 3	2¾ 3	5 0	4/- Apr. 29 '96	5 0 0	50,400	Italy ...	Dashwood Ho., E.C.
Linares ...L	5 5⅛	5 5⅛	3 0	9/- Apr 15 '96	3 0 0	14,998	Spain ..	6, Queen-street-place.
Mason & Barry...C	3 3¼	3 3¼	5 0	2/ May 23 '94	5 0 0	185,172	Portugal	87, Cannon-street.
Pestarena ...G	4/6 5/6	5/ 6/	3 0	—	3 0 0	67,209	Italy ...	6-7, Queen-street-pl.
Pontgibaud ...SL	—	—	20 0	11/6 Dec. '84	20 0 0	14,000	Coueron...	„
Rio Tinto ...C	22⅛ 22⅜	22⅛ 22⅜	10 0	12/- May 9, '96	10 0 0	325,000	Spain ...	30, St. Swithin's-lane
„ (1st Mrt. Bds)	103⅛ 104⅛	103⅛ 104⅛	100 0	4% July 1, 96	100 0 0	£3600,000	„ ...	„
Ripanji ...SQ	—	—	1 0	—	0 19 0	95,000	Servia ...	120, Bishopsgt-st. Wal
Tharsis... C Sul	5⅞ 5⅞	5⅞ 5⅞	2 0	7/- Apr 29 '96	2 0 0	625,000	Spain ...	Glasgow.
West Prus Pre.pref	—	—	10 0	5% Mar. 31 '96	10 0 0	1,500	Germany	Walbrook Ho., E.C.
„ Prussian Pre.	—	—	10 0	8% June 30 '96	10 0 0	5,450	„	„
„ Prussian Or.	—	—	10 0	6% June 30 96	10 0 0	14,050	„	„
Wohlfahrt ...L	—	—	1 0	3% Dec. '94	1 0 0	99,634	Prussia ..	17, Victoria-st., S.W
„ ...	—	—	1 0	3% Dec. '94	0 10 0	9,090		„

NORTH AMERICAN MINES.

Name.	Closing Price, Aug. 14, 1896	Closing Price, Aug 7, 1896.	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Alaska Mexican...G	1¼ 1⅜	1¼ 1⅜ xd	$5	4 4-5d. Feb., '96	$5	173,500	Alaska...	30, St. Swithin's-ln.
„ TreadwellG	5 5⅜	4¾ 5¼ xd	$25	1/ June 30, '96	$25	200,000	„	„ „
Anaconda ...C	6⅜ 6⅝	6⅜ 6⅝	$25	10% May 9, '96	$25	1,200,000	Montana...	„ „
Anglo Mexican ...S	¼ ½	¼ ½	5 0	1/- July 15 96	5 0 0	74,850	„	23, College Hill;
Arizona (Pref.) Cu	53/3 55/9	56/ 56/6	4 0	1/6 July 15, '96	4 0 0	158,920	Arizona...	74, Geo.-st., Edinbor
„ 6½ A Deben.	114¼	113½ 114½	100 0	6½% May 14'96	100 0 0	£135,300	„	
„ 7% B Deben.	102	101½ 102	100 0	7% May. 14 '96	100 0 0	£181,300	„	
De Lamar...GS	14/6 15/6	14/6 15/6	1 0	1/- Feb. 13 '96	1 0 0	400,000	Idaho...	6, Drapers-gardens.
Dickens CusterGS	-/6 1/-	-/6 1/	1 0	—	0 19 9	420,000	„	Winchester Ho. E.C.
Doric...G	7/6 8/6	6/- 7/	5/	—	0 5 6	125,000	Colorado...	
Elkhorn Priority S	⅛dis ⅛ pm.	⅛dis ⅛pm	1 0	-/3 June 26 '95	0 10 0	175,007	Montana	6, Draper's-gardens.
Gen. M'g. Assoc. ...	5¾ 6¼	5¾ 6¼	5 10	12/-May 14 '96	5 10 0	27,469	C. Breton	Blomfield House.
Golden Feather G	⅛ ⅜	⅛ ⅜	1 0	—	1 0 0	180,000	California	St. Stephens Cs E.C
„ Gate...G	3/- 4/-	3/- 4/-	1 0	—	0 19 6	79,680	„	„
„ Leaf...G	-/9 1/3	/9 1/3	1 0	—	1 0 0	100,259	Montana	6, Draper's Gardens.
Hall Mines ...	2 7/16 2 9/16	—	1 0	—	1 0 0	250,000	Brit. Col.	1, Leadenhall St., EC
Harquahala... G	1/6 2/6	2/- 3/-	1 0	-/6 Nov. 14, '94	1 0 0	300,000	Arizona ..	6, Draper's Gardens.
Holcomb Valley G	/9 1/3	/9 1/3	5/	—	0 5 0	540,000	California	14, Cornhill, E.C.
Jackson Goldfields	/3 /6	/3 /9	5 0	—	0 5 0	408,635	„	11, Poultry, E.C.
La Plata...S	/3 /9	/3 /9	5/	1/3 Oct. '82	0 4 6	465,000	Colorado	11, Poultry, E.C.
La Yesca ...GS	1/- 1/6	1/9 2/3	1 0	—	0 19 6	200,000	Mexico ..	20, Bucklersbury, EC
Montana ... GS	4/- 5/-	4/ 5/	1 0	-/3 June 26 '96	0 19 0	657,158	Montana	Gresham House, E.C.
New Guston ...S	⅛ ¼	⅛ ¼	1 0	1/- Oct. '92	1 0 0	110,000	Colorado	25a, Old Broad-st.
Palmarejo ...GS	2/3 2/9	1/9 2/3	1 0	—	1 0 0	418,888	Mexico ...	32, Old Jewry, E.C.
PinosAltos(Df)GS	⅛ 3/16	⅛ 3/16	1 0	-/6 Mar.' 90	1 0 0	100,000	„	110, Cannon-street.
Richmond ...GSL	1⅛ 1⅜	¾ 1⅛	5 0	1/- Dec. 16 '95	5 0 0	54,000	Nevada ...	44, Coleman-street.
St. George ...	/3 /9	/3 /9	5/	—	0 5 0	—	G'o'giaUSA	8, Geo Ho., E'cheap
Sierra Buttes ...G	5/16 7/16	5/16 7/16	2 0	-/3 Apr. 29 '96	2 0 0	122,500	California	138, Leadenhall-st.
„ Plumas Eur. G	7/16 9/16	7/16 9/16	2 0	-/9 Apr. 29 '96	2 0 0	140,265	„	„
Springdale...G	1/- 1/6	1/ 1/6	$1	-/2 Sep. 28, 9	$1	1,000,000	Colorado	20, Abchurch Lane.
Twin Lake Placers	1⅛ 1⅜	⅞ 1⅛	1 0	2/- Feb. '95	1 0 0	28,800	„	5, Lawrence P. Hl. E

SOUTH AND CENTRAL AMERICAN MINES.

Name.	Closing Price, Aug. 14, 1896	Closing Price, Aug 7, 1896.	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Anglo-Chilian PtN	8⅞ 9	8¾ 9¼	10 0	7/0 Feb. 27 96	10 0 0	35,000	Antofagst.	123, Bishops.-st W
„ 6% RylstMB	107 110	107 110	100 0	6% July 1 '96	100 0 0	£200,000	„	
Argen. Concessions	1/ 2/	1/ 2/	2/	—	0 2 0	150,000	S. Luis ...	3 & 5, Queen Street
Caratal...G	-/3 -/6	/1⅛ /1¼	2/6	—	0 2 6	1,330,000	Venezuela	57, Moorgate-st. E.C
Caylloma ...S	⅞ 1	⅞ 1	2 0	1/- Apr. 94	2 0 0	125,000	Peru ...	52, Leadenhall street
Choco ...G	-/9 1/	-/3 /9	5/	—	0 4 0	200,000	Colombia	5, Copthall-bdgs., E.C
Colorado Nit. ...N	1 1⅛	1 1⅛	5 0	2/6 Dec. 16, '95	5 0 0	32,000	Chili ...	12, King-st., Liverp'l
Colombian Hy...G	5/16 7/16	5/16 7/16	1 0	1/- Jy 26, '95	1 0 0	75,000	Colombia	10, Blomfield-street
Copiapo ...C	2 7/16 2 9/16	2 5/16 2 9/16	2 0	2/ May 29, '96	2 0 0	100,000	Chili ...	Dashwood House, E.C
Darien "A" ...G	6⅛ 6¾	7⅛ 7¼	1 0	—	1 0 0	40,553	Colombia	Manchester.
„ "B" ...	8¼ 8¾	8⅛ 8⅞	1 0	x.nwApr 29'96	1 0 0	30,000	„	„
El Callao ...G	⅜ ⅝	⅜ ⅝	5 0	9½d. Feb. '94	5 0 0	157,600	Venezuela	8, Bishopsgt.-st, Wn
Frontino & B....G	15/16 1 1/16	15/16 1 1/16	1 0	9d. July 15 '95	1 0 0	128,662	Colombia	184, Gresham House
Glenrock ...G	1/3 1/9	1/3 1/9	1 0	—	1 0 0	199,948	Arg. (& I.)	3-5, Queen-street, E.C
Grave' ...G	/6 1/6	/6 1/6	1 0	—	1 0 0	100,000	Colombia	10, Blomfield-street
Guadalupe ...GS	3/6 5/-	3/6 5/	1 0	—	1 0 0	120,000	Honduras	14, Union ct, Old Brd
Julia Taltal ...N	—	—	1 0	—	1 0 0	105,234	Nicaragua	139, Cannon-street.
Lagunas ...N	1⅜ 2⅛	1¾ 2¼	5 0	15p.c. Dec.'94	5 0 0	120,000	Tarapaca	3, Gracechurch st;
Lautaro ...N	5⅛ 6	5⅛ 6	5 0	5/- June 26 '9	5 0 0	110,000	Chili ...	70, „
Liverpool ...N	8 9	8 9	5 0	15/- May 1, 96	5 0 0	22,000	„	Liverpool.
Loma ...G	0/0 -/6	/6	1 0	—	1 0 0	300,000	Colombia	5, Copthall-buildings
London Nit....N	1¾ 2¼	1¾ 2¼	3 0	3/4⅛% Nov. '95	5 0 0	10,000	Chili ...	9, Gracechurch-st.
„ Nit.(Pref.)	3 4	3 4	5 0	3% Nov. 28 '95	5 0 0	22,000	„	„
Macate ...	1/ 1/6	1/- 1/6	2/	—	0 2 0	200,000	Peru ...	11, Old Broad-st, E.C
New Tamarugal N	⅜ ¾	⅜ ¾	1 10	1s. Dec. '95	1 10 0	130,000	Tarapaca	60, Lime-street, E.C
„ 8% Cum Pref	⅜ ⅝	⅜ ⅝	1 10	8 p.c. Feb. '95	1 10 0	130,000	„	„
„ 6 p.c. Debs ...	83 87	84 88	100 0	6 p.c. Feb. '96	100 0 0	£260,000	„	„
Oriba ...G	/9 1/3	/9 1/3	1 0	1/- April '89	1 0 0	80,000	Colombia	10, Blomfield-street
Ouro Preto ...G	—	—	1 0	1/- Feb. '96	1 0 0	80,000	Brazil ...	6, Queen-street-place
Pac. & Jazpampa N	⅜ ⅞	⅜ ⅞	5 0	4/- May, '95	5 0 0	72,000	Tarapaca	3, Gracechurch-st.
Phoenix ...	-/3 -/9	/3 -/3	10/-	—	0 8 0	400,000	S. Luis ...	3 & 5, Queen Street.
Quebrada ...C	⅜ ¾	⅜ ¾	3 0	5% Mar. '92	3 0 0	241,036	Venezuela	24, Nicholas Lane.
Rosario ...N	4¾ 5¼ xd	4¾ 5¼	5 0	2/- Aug 13 '96	5 0 0	110,000	Chili ...	7½ OldBroad-stree
„ (5% Deb.)	104 107	104 107	100 0	5% Apr. 1 '96	100 0 0	£475,000	„	
„ Hu'r Db Serp	103 108	103 106	100 0	5% July 1 '96	100 0 0	£200,000	„	„
St. John del Rey G	¾ ⅞	¾ ⅞	1 0	x.rtsNov 19 '95	1 0 0	327,650	Brazil ...	Finsby.Ho., Blmf'd st
San Donato ...N	¾ 1⅛	¾ 1⅛	5 0	2/6 May 24 '95	5 0 0	32,000	Chili ...	12, King-st., Liverp'l
„ Jorge ...N	5 5⅜	5 5⅜	5 0	7/6 May, 29 '96	5 0 0	75,000	„	9, Gracechurch-st.
„ Pablo ...N	1⅛ 2	1⅛ 2	5 0	5/ Oct. 30 '95	5 0 0	32,000	„	
„ S-bastian ...N	1¼ 1¾	1¼ 1¾	5 0	1/ July 1 '95	5 0 0	29,000	„	Dashwood House E.C
Santa Barbara ...G	⅛ 5/16	⅛ 5/16	10/	/3 Dec. '86	0 10 0	60,000	Brazil ...	Liverpool
„ Elena ...N	¼ ½	¼ ½	5 0	5/-Nov. 15 '94	5 0 0	22,000	Tarapaca	3, Gracechurch-st.
„ Rita ...N	3⅛ 3⅜	3⅛ 2⅜	5 0	15/ May 29 '96	5 0 0	22,000	Chili ...	DashwoodHouse, E.C
Taltal "A" ...S	4⅛ 5⅛	4⅛ 5⅛	5 0	5/-Mar. 12 '96	5 0 0	14,000	„	10, Finsbury-circus
„ "B" ...S	4 5	4 5	5 0	5/- Mar 12 '96	5 0 0	6,00	„	

Reports from the Mines Continued.

NEW ZEALAND.

BLAGROVE'S FREEHOLD.—The agents' report under date June 27: We beg to hand you the report of work done in the above mine for the month ending this day. The crosscut has been extended east a further distance of 65 feet by six men. The country rock at this point has become considerably harder, and of a closer nature. There is a nice silica vein running across the drive diagonally, otherwise there is no change. The four shaftmen have been engaged putting in pitwork for the pole—viz., put tank into position, also dead end, windbore, H-piece, door piece, pole case and pole, partly reared up columns, put in plunger head and Yorke stays, and main rod. The smith has been engaged making ironwork for plunger pole, and doing the general work. The carpenter has stocked the pole; butted, bored, and fitted on strapping plates to main rods, and the general work as required. Four men have been partly engaged on the winch in lowering away the pitwork, and ridding up and timbering an old shaft, to clear out a drive leading to the winze, which is sunk 25 feet below the bottom of the drive, and is now drained by the 200 feet crosscut. Our idea for doing this work is to prospect this portion of the mine. At the bottom of the old shaft the reef is about 4 inches wide, and when washed shows gold freely. The surface men have been assisting the smith, carpenter, &c., and trucking. The machinery and pitwork are working well.

KATHLEEN CROWN.—The agent reports under date June 26: We beg to hand you the following report for the four weeks ending 27th inst.:—During the month the engine shaft has been sunk 13 feet by nine men, making the total depth from the surface 60 feet. The country rock is very hard andesite, which, combined with the influx of water, has caused the sinking to be rather slow. However, we hope to get through the hard belt of rock shortly.—Adit level. This has been extended 37 feet by two men. During the driving we intersected a number of quartz veins, which we consider a very favourable indication. As soon as the adit level is holed to the engine shaft we shall cut a small chamber, by doing which the mullock can be trucked out through the adit level, and thus save hoisting the mullock 60 feet. We shall push on the sinking as fast as possible.—Surface work. All necessary excavations for office and store room are completed, and the buildings in course of erection. Road making is rather slow, owing to the wet weather. However, we hope to finish the road before the machinery arrives.

KAPANGA.—The acting manager reports under date June 27:—I beg to hand you the following report for the month ending as above: Larnach's engine shaft. This has been sunk 12 feet by 16 men, making the total depth 149 feet below the 800 feet level. The class of rock passed is everything that can be desired as a gold bearing rock, although tough for shooting. The shaft is timbered to the bottom, and the pent house finished, also the necessary doors put on the shaft in order to protect the men employed below. Footways have been put in with all necessary sollers. Of late the progress of sinking has been slow, owing to the heavy floods. Besides, it would not be safe to drive our pumping engine at a high speed, because the balance lift is not yet fixed. When sinking we cut through a small leader about 2 inches thick, running north east dipping west. Other small quartz veins have been met with of a very promising character. As we proceed down, we expect to intersect the reef cut by the bore; while the indications at the bottom of the mine speak well for the future prospects of the company. The reef carrying the gold has dipped out of the shaft, so that we have not taken down any more of the reef than was necessary for the engine shaft.—Rising above 800 crosscut on the Kapanga reef. This has been extended 12 feet by 4 men. The reef is 3 feet thick, composed of quartz and clay mixed with country rock. It has a very disturbed appearance at present caused by a fault. Water is coming out freely, and the country rock is improving as we advance.—Rise above 800 on Kapanga reef. The rise is extended 5 feet by two men. The reef has carried a little gold up to the time of holding through to what is known as Cotter's winze, and this has caused better ventilation. Driving south of 800 rise. Two men have extended this drive 24 feet, the country rock of which is very hard, but highly mineralised. The reef is 14 inches thick, carrying a well defined hanging wall, but the ore is of low grade.—Stoping above the last mentioned drive. The stope, measuring 21 by 12 feet was done by two men. The reef is improving, and at times shows strong blotches of the precious metal, and judging from the appearances, we have got a good block for stoping.—Driving north of rise on Kapanga reef. This drive has been extended 22 feet by two men. The reef is 18 inches thick, carrying a well defined wall. So far, the ore is only of low grade. Our reason for extending this drive is to prove the untried ground north of Larnach's engine shaft, where very little work is done; and as the Albion run is dipping north, and other shoots are known to be in this direction, the probabilities are that the north of the shaft will prove as productive as the south.—Driving the 420 south of the Kapanga reef. We have cleared and timbered the drive for a distance of 76 feet, also extended the main drive 14 feet by two men. The country rock is composed of very good decomposed andesite, and the reef is improving as we advance. The latter is 18 inches wide, highly mineralised, and carrying good dark pug. In order to get under the run of gold got below the 300 we must extend the drive about 180 feet. This, I think, a very important point, and worthy of a trial, as it will open up a large block.—Rising above the intermediate on Kapanga reef. This has been extended 18 feet by two men. The reef is very small, only a seam of clay, and at the same time very flat, but it may change at any time and yield rich ore.—Stoping north of the last mentioned rise. The stope measured 22 by 6 feet. The reef is 2 feet thick, containing ore of lode grade, but showing signs of improvement. It carries a little native arsenic associated with calcite.—Rising north above intermediate on Kapanga Reef. The rise has been extended 26 feet by two men. The country rock is highly mineralised, carrying small mineralised veins. The reef is 20 inches thick, composed of quartz and pug, carrying a little gold, a patch of which might be struck at any moment.—420 in Scotty. This rise has been extended 14 feet by two men. During the time of rising, we met with some good stone. The reef is about 4 feet thick, and is now showing strong blotches of gold. I think I may say that the importance of this cannot be over estimated, inasmuch as this is the first appearance of gold found south of the main crosscut at the 420. This may prove to be the continuation of the 300 run of gold. We shall be able to get large blocks for stoping out.—Extending the intermediate on Scotty's hanging wall. This has been extended 12 feet by two men. The reef is 10 inches thick. In breaking down which strong blotches of gold were seen in the solid stone, this is a very encouraging sign, and we are hoping that it will lead to the discovery of a rich patch. In all probability, this is the continuation of the run of gold that was lost in the intermediate proper on Scotty's footwall section.—Corby section. No. 1 drive has been extended by two men 11 feet, the country rock being very hard but highly mineralised. The reef is 6 inches thick, composed of quartz and calcite, together with a little pyrites. The indications are most favourable, but so far nothing of importance has been met with; however, we have about 100 feet more to drive. When this is completed we shall commence to crosscut in order to pick up Scotty's reef. This work will be pushed on as fast as possible in order to make this section remunerative.—No. 2 rise above the bottom level. This rise has been put up a further distance of 16 feet by two men. The reef is 12 inches thick, solid quartz. So far no gold has been seen. The country rock is hard andesite; the country is very broken and disordered by the influence of small slides.—Cotter's winze. This has been sunk 12 feet by two men. The reef is very small, only an inch thick, showing colours of gold in breaking down. Seeing we have not reached the junction, we purpose driving a short crosscut in order to strike the Kapanga reef.—Battery returns. During the month we have crushed 75 tons of quartz, which gave 217 ounces of amalgam, yielding 81 ounces 17 dwts. melted gold. All machinery and pitwork working well.

NEW HAURAKI GOLD.—The manager reports under date July 3: Herewith I beg to hand you the following monthly report. At a point 37 feet on the line of the South Tokatea reef in our deep level southwards a rise was commenced to communicate with the winze now being sunk on the same reef. We have risen in three weeks 36½ feet, timbered the same, and put in a shoot in the bottom of same, size 10 feet by 4 feet with two centre pieces. The reef is more defined than hitherto, composed of crystallised quartz lying against a hard hanging wall; about 50 feet more rising and sinking will effect a communication. The South Tokatea winze measures 73 feet, being 17 feet sunk for the month by four men. The reef averaged about 4 inches wide of the same character as in the deep level rise.—Nichol's reef. The total distance driven on the level crosscut was 296 feet, intersecting Nichol's reef at a point 285 feet, bearing 35° south of east and underlaying south-west 6 inches to 1 fathom. The width of reef is 6 inches, and the quartz is very compact widening as the end advances south-east. The crosscut has been driven for the month 41 feet and 14 feet on the line of reef by six men. We have now started rising to communicate with Nichol's winze, which means 71 feet to rise and sink to prove and ventilate this part of the mine. Nichol's winze is nearly in order—*i.e.*, retimbered and cleaned up for resuming sinking, being now all free from water. The distance sunk here is 36 feet, but it will take several more feet sinking to intersect the underlay of the cross reef in the winze which is just tapped by a short crosscut on the footwall side of the winze from the level.—East and west reef. We have driven in the deep level on the footwall side of this reef a total distance of 62 feet, being 30 feet for the month. The assay of the quartz from this reef does not assay gold.—The Queen crosscut is in most favourable shooting country, and driven for the month 46 feet, total distance 174 feet. The country rock we are now in is unusually hard and contrary in the West Prospecting crosscut, hence progress is very slow, being 23 feet for the month, total distance driven 123 feet by four men.—Timber. Six bushmen have procured for the month 424 legs, 552 caps, 1612 slabs, besides fixing wire ropes to carry forest timber at any time for mining purposes in the 14½ acre section. In conclusion I may say that as soon as we effect communication for ventilation purposes from the Tokatea to the deep level we shall be well prepared to develop that reef from the deep level crosscut, as well as to start an intermediate from the rise now going up to drive northerly. I may say in a reef of this description, which is apt to yield very rich gold, it requires a through and through development, and inasmuch as this will open up a very large section of ground and all drained we hope to meet with good results. Referring to Nichol's reef the same remark will also apply to this section of work, which is being pushed on as fast as possible, and inasmuch as our dead work is very nearly completed, our work will very shortly be on the line of reef.

HAURAKI.—The manager reports under date July 1:—Herewith I beg to hand you the following report for the four weeks ending 27th ult.: Engine shaft. The engine shaft was sunk 23 feet 6 inches, total distance now 272 feet. There is a splendid channel rock in the bottom of the shaft.—320 feet level. On No. 2 reef north we extended our level 47 feet, total 191 feet. The reef was large, being 2 feet and producing good crushing ore and specimen stone up to where we intersected No. 2 winze. Here a change of rock has come in which has disordered the reef very much. This, I may say, has been the case in all our northern levels, but in the 220 we have met it sooner than in the upper levels, and I have no hope for this reef north of this point. I think our New Year's reef, or a part thereof, having junctioned with No. 2, and with the channel of country it carries has caused the disordered lode. There is no impediment to our future reserves through this cause, if our reef continue productive going down, as we have ample ground through the Iona to follow it downwards.—320 crosscut S.W. We drove this crosscut during the past month 12 feet, cutting the formation where the No. 3 reef should be. We have opened out northerly 40 feet 6 inches, but nothing of importance has been discovered; merely cutting through two small leaders, we did not see any gold, although the quartz and country look very fair.—Stoping on No. 2 reef over the 220 feet level. These stopes are being pushed on with good results, the reef turning out large quantities of good crushing ore and some good picked stone.—Stoping New Year's reef over 160 level. These stopes are progressing well; the reef is about 2 feet 6 inches wide, and turning out good general crushing ore. A small leader in the hanging wall of this reef gave good general dirt and picked stone, but to work this properly it will have to be discovered in the 160 feet level, and operated upon from that level.—New Year's reef over 100 feet level. These stopes have been taken away to where it junctioned with No. 2 reef stopes, and the men are now driving north on a branch leader on the top of the New Year's winze with fair results. When opened out properly it should turn out good ore, as gold has been freely seen in the drivage.—Stoping No. 2 reef north over the 160. Stoping here during the month has given poor results, the reef being near the broken country in the end, and will soon have to be abandoned.—Reef No. 2 south 100 feet level. We have been getting fair quality ore from this reef south of the Tribute winze; has averages 18 inches wide. The stopes south of No. 1 winze will be started on this month.—100 feet level. Iona crosscut east has been driven for the month 63 feet. The total distance from the shaft is now 514 feet. One or two small veins and one fine reef referred to in a cable to you were cut through running north-west and south-east, dip south-west. This I should call your attention to is dipping towards our shaft, and is in a good class of rock. In all probability this is the Castle Rock reef. This reef will be developed as soon as our crosscut reaches our boundary, and in so doing I have great hopes of making valuable discoveries. This reef, of course, traverses the entire length of our Iona section purchase, and no doubt will recoup all our outlay irrespective of the Iona reefs.—160 feet level. We have a crosscut in progress towards the Iona shaft. One or two veins showing colours of gold have been met with in this. Having received your authority a few days ago to carry out the sinking of this shaft this matter will now be pushed.—160 feet level crosscut north east from New Year's reef: This has been driven 25 feet, intersecting the Iona No. 2 reef. The reef is about 6 inches wide and looks well for gold. We have started to rise from the back of this level, and to sink below the 100 feet level on this lode. It will open up a good section of ground, from which I expect good ore.—Cross reef over 160 feet. We have stoped on this reef north and south of the slide and obtained good payable ore during the month.—Stoping No. 3 reef. Stoping on this reef over the 100 feet level has been continued during the month, from which development first class crushing ore has been obtained. We are getting up near the tributers old works in the old level, consequently our operations in this direction are nearly exhausted.—Month's returns. We treated for the month 350 tons of quartz and 723 lbs. of picked stone, which gave us 2094 ounces 3 dwts, melted bullion, which realised £3483 12s. 5d. Our battery is in good trim and working satisfactorily, the same remark will apply to all the machinery both above and below ground throughout the company's property. We are also hauling our coals direct from the company's wharf to the engines through the tunnel which effects a saving to the company of at least 2s. per ton in freight land carriage. In conclusion, I would say that our New Year's reef and No. 3 reef do not in the deeper levels produce anything like what we had in the 100 feet and above. At the same time our discovery of the Iona reefs have made up for the deficiency. Our cross vein, so far as developed, is completely exhausted and poor; at the same time our No. 2 reef below the 160 has improved to the 220 which has made up for that deficiency. We have a good reserve from our 220 on No. 2 to the 160. Our shaft will soon be down to the 300 feet, when no time will be lost in opening up that level. The Iona shaft will be brought into use now as speedily as possible, in order to relieve our winding engine, which is now working all the time. We shall also be opening the Castle Rock reef, and have the Iona engine at work to take away any quartz in that reef, which will be on the same tramway leading to our battery. If our No. 2 continues to go down to the 300 feet as good as we have in our stopes above the 220, we shall keep our monthly returns together, but I can assure you what we have done in the past could have only been done with such regularity, only by developing the property throughout, carrying deadwork, and thoroughly working all the veins discovered. We will continue to do our best on the same lines, and if we are successful we shall have something to be proud of. Our reserves were never greater than at present—*i.e.*, the amount of ground opened up, if the gold is in it, we shall have no difficulty in keeping up our results, or in other words any falling off in the reef must be felt from time to time in our returns. We will endeavour to do our best in these matters. In order to again show you where we have worked I am sending you plans of sections of ground taken away and in reserve on the various reefs.

KATHLEEN.—The manager reports under date July 2:—I beg to hand you the following report of progress, &c., since my last: The puddling of the surface water around the collar of Hartridge's shaft has been completed. Since then we have drained the shaft of water and sunk the shaft another 9 feet 6 inches. The shaft to-day measures 120 feet. We have now no difficulty in sinking our shaft, and barring any unforeseen cutting large bodies of water in deepening the shaft, I hope to go on sinking deep enough with our temporary plant to open out a level. The rock we are now penetrating is of a favourable decomposed blue andesite. I trust in another 15 or 20 feet we shall have a more compressed rock. I like the appearance of the rock very much. It is highly mineralised, and in every way congenial for gold, and as I have repeatedly told you in my former reports, we may at any stroke of the pick cut a reef, so that while we can continue to sink it is very important to the company. We are now in the middle of winter. All the ground around our shaft is running in water and of a very swampy nature, and considering that we are sinking the shaft with a temporary plant only at the rate of 9 feet a week, there is little to complain of. As soon as I hear from you, or rather have your authority to drive the Hauraki 160 crosscut into our ground with the company's consent, and we have reached the Kathleen boundary, this point shall be pushed on. I may say this point, as well as the shaft, will be a very important development, as I feel persuaded reefs exist close to the Hauraki boundary, or rather in the Kathleen, and dipping towards our main shaft, and at this depth we shall have fair chances of discovering gold, and the operation will give us a basis as to how far we shall have to drive the crosscut from our shaft to intersect any reefs underlying towards it. Our costs while we are sinking the shaft are somewhat high. We have to employ engine drivers the same as would be for permanent plant; we have to keep a full staff of men in the shaft, with coals and very heavy timber bills to pay for.—In conclusion, it is just possible ere I write you another report, that I may be able to report cutting a reef or veins in the shaft. One of our boilers has arrived and some other parts of machinery, and I trust ere long we may receive the engine itself.

KOMATA QUEEN.—The acting manager reports under date July 9: I beg to submit report on above property for month ending July 1. The prospecting of the property has been carried on vigorously the main works being, cutting and following along the lines of reef and trenching across them to ascertain their width at different places, at intervals of 2 to 4 chains. The two reefs have been traced from the north boundary of the property. Argall's lode having a course about south 10° west and Lavington's east of south. These two lodes diverged until Lavington's lode came in on a creek running in a south-west direction through the property. Lavington's lode then followed the course of this creek till it came near the line of Argall's lode a point 15 chains south of north boundary. The lode being very strong all along the creek. Trenching has been carried on and stone cut, which has the direction and character of Argall's lode. The Lavington's lode not being found further on in its course shows there may be a junction at this place. This can only be proved by tunnelling, as at this point the surface does not admit of trenching. At a point a little further back from this assumed junction a trench has been cut showing the lode to be here 85 feet in width. Argall's lode has been traced in a southerly direction for 26 chains, and shows a reef from 2 feet 6 inches to 9 feet in width. Towards the end of this line the reef was pinched, and only showed about 6 inches at the surface. In all 17 chains of trenching and 24 feet of driving, and 40 chains of line cutting have been done in connection with following this lode. Lavington's lode being followed 15 chains, with a reef exposed in the trenches of from 12 to 40 feet in width. On this line 15½ chains of trenching and 22 chains of line have been cut out. Trenching is being carried on further to the east to see whether it runs parallel to the main lode after crossing the creek. Further south on the line the surface of the country overlying the lodes becomes flat, with every indication of deep surface, which will make trenching very heavy work, and most probably tunnelling will have to be resorted to. A deep gorge exists not far from the reef line which may be utilised for the purpose of driving a low level. Trenching is also carried on near the west boundary to try and cut the Komata reef, as strong indications of a lode exist in that locality. Besides the above works, tracks have been cut to get about to the various parts of the property where work has been carried on. The foregoing shows that the reefs live a great distance into this property, and will, no doubt, be followed right through it. The severe winter weather we are now experiencing considerably retards the progress of all outdoor work. The success, however, hitherto attained, shows this property to be largely increasing in value as developments are carried out. As soon as the surface prospecting work is concluded we shall lay off the drives to intersect the lodes at the required levels, when, I have no doubt whatever, that we shall attain rich runs of gold as in the adjoining mine, the Komata Reefs.

KOMATA REEFS.—The acting manager reports under date July 9: I beg to submit report for month ending July 1 as follows: The drive south on Argall's lode from No. 2 crosscut has been extended 52 feet, making a total distance of 160 feet from No. 2 crosscut. The reef is gradually getting smaller, and is now only a few inches wide with the walls coming closer and harder. This seems to be into the hard belt of country just north of the main crosscut. The prospects have been fairish all along. This drive was holed through to the drive coming north the distance through being 17 feet. A drive has also been put in 5 feet 6 inches on Argall's lode north of No. 3 crosscut showing a good-sized lode carrying good gold. This is on the footwall portion only. In No. 1 drive north of main crosscut it was extended 3 feet when crosscutting was commenced to hole through as mentioned above. Driving has been prosecuted south of main crosscut to the extent of 25 feet on footwall portion of Argall's lode. In this place the lode is very large, neither wall being visible. Very good prospects can be got right across the face, showing this to be a very good class of ore. On the north side of main crosscut men have been taking out the hangingwall portion of Argall's lode, but there is not so much stone as expected, as it is very much broken and difficult to follow. The main crosscut has been extended 31 feet for month, making a total distance from surface of 434 feet. The ground has been very hard, but kindly country has been passed through. One vein of quartz has been passed through near the present face. This may be a part of the black reef which may be struck any day now. This distance ends the contract of Whitworth and party. The outside works are progressing fairly. The assay office is ready for erection of furnace and commencement of work. The water wheel is in the course of completion, and the air pipes are being made. On the water race about 40 chains of ditch and batter have been cut out which completed the earthwork. Nos. 2 and 3 dams have been put in, and are both very good constructions. No. 2 branch race has been put in and Graydon's branch is in hand. All the fluming has been put in down to Graydon's which completes Nos. 1 and 2 sections. Good headway is being made with No. 3 section, only the timber work having to be put up. The contractors have been delayed by the late bad weather and a few slips have occurred, but the damage can be easily repaired in a few days. The road up Komata Creek is getting on as well as the weather permits but is at present impossible for more than foot traffic, nor will it be possible to carry machinery over it until the summer (say) in November. Prior to this Mr. Argall will have seen you in reference to a complete battery plant of sufficient number and weight of stamps to deal with the large lodes which form such a marked feature of your mine. I may add that in dry crushing, which we consider necessary in treating our ores, considerable advance has been made lately, it having been found that a moderately heavy stamp is far more economical than a lighter one, and the other primary portions of the battery naturally require the same increase of stability to sustain the increased blow. This is our latest experience, and all the plants now being erected partake of this latest development.

PREECE'S POINT PROPRIETARY (Hauraki).—The agent's report under date June 30: We beg to hand you the following report of the work done during the four weeks ending June 27. Sinking engine shaft. The work was carried on for 16 days only, during which time the shaft was sunk 10 feet, making the total depth from the surface at the present time 180 feet, all securely timbered. The influx of water being too great for manual labour, we decided to stop sinking till the erection of the pumping engine. At the present time the water has risen 25 feet and is still rising. Before leaving the bottom everything was made secure, so that during the time that must elapse before the pump can be started, no danger need be feared from the accumulated water. At the present time there are four men engaged in the shaft removing windlass, shifting ladders, and putting in carriers for the cage guides. The rest of the men are employed on the surface in the erection of the machinery. The nature of the country passed through while sinking is everything that can be desired as a gold-producing rock; and as greater depth is attained there is every probability that improvement will be seen, as the country appears to be more compact.—Erection of machinery. This work has been carried on energetically during the past month. The loading for the winding engine has been built, and all the preliminary brickwork for the boilers put in. At the present time these are in position, and the bricklayers are proceeding with flues, &c. Our supply of material has proved sufficient for our requirements, and we have been fortunate in having such a quantity so conveniently situated to the work. Part of the timber bedding for the pumping engine has been laid, and everything is being done to prepare for the erection of the machinery at a very early date. On June 14 the machinery arrived by scow from Auckland, and the work of unloading it was proceeded with at once. All the parts are on the ground, and most of it in close proximity to the engine foundations, whilst the two boilers are in position and ready to be built in—a work that has been previously mentioned. The machinery, both pumping and winding, appears to be well adapted for the work required of it, and is undoubtedly a first-class plant.—Surface work. This, for the greater part of the month, has been in connection with the engine foundations already alluded to. For about a week we were engaged in laying fascines on the road from the beach, and thus preparing for the conveyance of the machinery, which would have been a difficult matter had this not been done. The smith and his assistants have been engaged in making bolts and other work required for the poppet legs and machinery. The carpenter has been employed cutting frames for the shaft, and other necessary work in the same direction.

SUCCESS GOLD MINES.—The manager reports under date July 3:—I beg to hand you the following monthly report: Big reef crosscut. In the Big reef crosscut six men have driven for the month 62 feet, bringing up the total distance driven to 522 feet. Considering the hardness of the country passed through a week ago, this has been good progress. The rock to-day in the forebreast is of a moderate character for driving, which I hope will continue until we intersect James' reef; this we should do in another 35 feet driving.—Big reef winze. This winze is now timbered from top to bottom, and made into a substantial hopper for all quartz won from the Success and James' workings for the battery. James' east stope from No. 2 rise has produced this month 11 lbs. of picked specimen stones of gold, which carry as much as 4 or 5 ounces to the lb., and also about 1 cwt. of good specimen dirt has been obtained, and a few tons of general crushing dirt. The leader portion will average about 4 inches wide, and is looking well at present. The stope for the month measured 43 feet, total length of stope 59 feet. James' west stope from No. 2 rise measures 18 feet for the month by two men, total length of stope 42 feet. This stope is also improving, and carrying good crushing dirt, the leader averaging about 6 inches wide.—James' west stope from James' crosscut. This stope was opened 53 feet for the month by two men, total 75 feet. The reef in this stope carried good prospect of gold. We are now timbering up James' west rise preparatory to stoping out a block of ground above Macdonald's level. James' east and west stopes from No. 3 rise above intermediate level have been stoped 76 feet by four men. At present the western stope only is in operation, so as to get back under where the former workers got some of their best returns of gold. Rise south on No. 2 Success reef is retimbered up, and two men are stoping south of the same from that point which carries colours of gold in a silica formation, although the leader part is somewhat pinched. James' reef eastward is still small and pinched, while the country remains very hard. It has been driven for the month by two men 12 feet, besides placing in three sets of timber where the slide is. Driven north in No. 2 Success reef from the winze 68 feet. The pair of men is now driving south from winze where the reef is more promising, month's drivage 14 feet.—Success intermediate reef from Success winze crosscut. This is driven nearly 20 feet where the reef is somewhat disordered and the quartz mixed up in the country rock, consequently we are now driving south, and have driven 15 feet. The reef here at this point is bearing round considerably east of south, and will junction at no great distance with No. 2 Success reef. Distance driven for the month 29 feet. The agent's dwelling house is now finished, and the men's changing house is progressing well. We have also placed doors to all our principal levels. Since we commenced stoping we have won about 30 tons of crushing dirt from James's reef, making a total of about 320 tons of ore on hand. It is very difficult to give an estimate of the value of our ore, as a sample, without being taken in a practical way, which would be expensive, would not represent the bulk. We might take a good sample, *or vice versa*, but on the whole I consider it will turn out good payable ore.—Machinery. The contractors are now making good progress in erecting the battery. It is difficult to estimate how long it will be before we shall be able to start stamping, but as far as I can judge it will take them another six weeks. All this depends on the state of the weather; for the moment the weather is boisterous and extremely wet, and the roads are in such a bad condition that they will have great difficulty in getting up the boiler, which is at the foot of the hill. All works are being pushed on as fast as possible, and I have great hopes of the mine turning out well.

TARARU CREEK.—The acting manager reports under date July 8: During the past four weeks work in the various sections of the mine has been carried on as usual. The drive west of the rise at the intermediate level on the California reef has been extended 27 feet, making the total distance driven in this direction 72 feet. The reef averages 4 feet in thickness, is a compact looking body of ore; galena and blend are well distributed through the dirt, and gold is freely seen. A leading stope has been carried along over this drive a distance of 33 feet, and a good grade of ore has been won. Stoping between the two winzes over this same level is being continued. The reef here averages 4 feet in width, and a fair class of ore is coming to hand. Three stopes are being carried along the low level on the same reef. The reef in these stopes varies from 1 foot to 7 feet in thickness, the whole of which is being forwarded to the battery for treatment. The drive on the reef from the Missouri crosscut has advanced 35 feet, making the total distance driven west of the crosscut 99 feet. The reef is 18 inches in width. Although no gold has been seen a good class of country is being penetrated. Coming to the Dunedin section, the present low level on the Day Dawn reef has been carried forward 15 feet, making the total distance driven on the reef 237 feet. The reef averages 3 feet, galena and silica are well distributed through the hanging wall portion, and gold has been frequently seen in breaking down. The intermediate level on the same reef has been extended 35 feet, making the total distance driven at this level 200 feet. The reef in the eastern face of this drive is 2 feet 6 inches in thickness, and by dish process gives fair prospects of free gold. Above this level stoping is being carried on as usual with fairly good results. The drive west of the crosscut on the City of Dunedin reef at the low level has advanced about 35 feet, making the total distance driven 587 feet. Very little of the lode has been broken down during the past four weeks. The eastern drive on the same reef has been extended 56 feet, making the total distance driven in this direction 132 feet. The reef is 9 feet in width and by dish process a little free gold is to be seen. I am hopeful of soon meeting with payable dirt in this drive. The drive on the main reef in the battery level has advanced 36 feet, making the total distance driven from the crosscut 96 feet. We are still carrying the full width of the drive in this reef, and there is no appearance of either wall. Some of the quartz coming to hand looks very promising, but so far no gold has been seen. During the month the battery has been working one shift of eight hours with 20 head of stampers. The amount of amalgam on hand since last cleaning up is 200 ounces 11 dwts. squeezed in warm water. With the exception of the assay furnaces which will be finished in about three days, the work of erecting the cyanide plant is now complete. Battery. During the month 20 head of stamps have been kept going one shift of eight hours, while the berdans have been kept going full time. The cyanide plant is now completed, the only work not yet ready being the assay plant. The bricklayers have been delayed owing to the wet weather, and now that this work is nearly ready, every effort is being made to hasten the drying of the furnaces with due regard to their stability. The vanners are not ready and so adjusted as to work with great economy. The starting of these works will require very considerable judgment, and I shall make it my duty to be present as much as possible in the first few weeks. The work will be hurried, the object to my mind being efficiency of treatment first, while increased amount treated in a given period can be considered subsequently. That our present recovery does not exceed 25 per cent. I am satisfied, and my object is to reach as nearly to 100 per cent. as possible. I am fully aware that I have a difficult task before me, owing to the refractory nature of the ore, and also that the method of treatment is without precedent, therefore requiring still greater care in the start. I have no doubt, however, that the incidental difficulties which arise will be satisfactorily dealt with. Mr. Argall will shortly be with you and will more fully explain our position. The roads from the mine to battery are in a deplorable condition, but tenders have been called by the council, returnable to-day, to place these in better order.

LANDAU'S TRANSVAAL COLLIERIES.—Extract of report received from the secretary, dated July 11:—Some 1300 feet of levels have now been opened up on the Klipfontein seam. The coal maintains a uniform excellence throughout the mine. It is a bright, glittering coal, reminding me of good English household qualities.

YALGOO PUBLIC BATTERY.—Report dated June 19 from the mine manager, Mr. M. Wynn: Main shaft. The crosscut at water level from the main shaft has been extended 8 feet during the past fortnight, total 93 feet. The country continues hard, showing quartz veins varying from 1 to 9 inches in width, with an underlay from the west.—Underlay shaft. Still driving on the lode to the bottom of the winze. The course of the lode changes every few feet, but it will undoubtedly join the north and south lode at a depth. Lode carries a very fair quality of quartz, and is about 3 feet 6 inches wide.—Western reef. The shaft has been sunk 7 feet during fortnight, making a total of 28 feet. The reef continues about the same (4 feet), and show a gold but not of a high grade. About 20 tons of stone put to grass this fortnight of fair value, showing gold more freely than previously.—Yalgoo public battery. I have nothing to add to fortnightly report on this property, which is at present looking very well. Cable from Messrs. F. W. Prall and Co., Melbourne, states that first consignment of machinery has arrived at Mindaluerra and is in course of erection.

AUSTRALIAN AND NEW ZEALAND.

AROHA.—Fortnightly report by cable from the manager of the New Zealand Exploration Company, agents. Summary of work done during the fortnight from July 15 to July 21:—Premier section. The main tunnel has been extended 11 feet, and is now in 379 feet. The winze from Newsham's drive has been sunk 12 feet, and is now down 116 feet. Vulcan level going south has been extended 13 feet; is now in 125 feet. Vulcan level going north has been extended 12 feet, and is now in 187 feet. Vulcan mid level driven 14 feet, and is now in 112 feet.—Colonist section. Colonist Creek Tunnel is a new tunnel started at a lower level in the Colonist section to give 100 feet more of backs, and to unwater in the course of time both the Colonist and the Premier section. This drive has been extended 22 feet during the last fortnight, and is now in 115 feet. On the advice of Mr. E. J. Dunn, geologist, and Mr. Daw, the very able manager of the New Zealand Crown Mine, who has accepted to superintend also the development work at Aroha, the board are considering that, having as yet opened out only a part of the northern section of this property, some similar, or even more important, work should be undertaken in the southern section at the other end of the reef, where surface indications are at least as favourable as in the northern part. Mr. Daw has been asked to submit estimates and plan of such works as he will find suitable for the purpose of working the mine economically on a large scale on that side.

ALLADIN'S.—The following advices, dated Lucknow, July 4, have been received from the superintendent by the mail:—500 north-west drive advanced 18½ feet, total 596 feet. Calcite has again made its appearance in this joint, the first, except very insignificant leaders, since the new vein was struck. Although still soft and easy to drive in, the character of the joint has materially changed since last week. Now the ground is not unlike that met with previous to our encountering the last ore body; before, it was exceedingly soft, the diorite and the serpentine being hardly distinguishable in this respect. The diorite is now harder and well marked. The change is undoubtedly a good one, and looks very promising.—500 north west (old stopes). We have got on to a good lead of pyrites in the extreme north west about 20 feet up from the 500, and which we are now working down to that level. This is a fine that was just mentioned a few months ago, but was scarcely touched then.—500 south east (old stopes). The middle and the boundary end are both looking really well. Where the lode is solid we have a length of 35 feet, averaging 2 feet thick; then it is somewhat broken before we come to the north west end. There are about 35 feet of backs above the middle and boundary end stopes before the 400 level is reached. The air pass goes up at the end of the shoot of ore right on the boundary. But little work has been done here for the past week other than timbering, but now the stope is ready again for working. At the north-west end we are stoping a width of 7 feet, and fine milling dirt carrying free gold as well as pyrites is being broken.—500 new vein. Work has been again delayed with timbering, &c., and we are taking out more ground than formerly. Only 1 foot has been sunk, making a total of 14 feet. Better progress will be made next week. The lode is stronger in appearance.—600 boundary. A little milling dirt has been broken from the roof of the level and half a bag of crude ore taken out, but this has now pinched. This body, together with the 600 backs must form the north-west shoot of ore as known in the 500 and upper levels, and should, therefore, be called such. The latter shows a slight improvement, though no bagging stuff is found. To-day a sample representing a good area of ground gave an assay of 3 ounces, and will make excellent milling dirt.—600 north west. We have a very strong vein here on rising, but hitherto the pyrite has been by no means good, being mixed with iron and other sulphides. A sample taken to-day, however, shows an improvement going 33·4 ounces. As we go up we may expect a marked advance in the quality of the ore the pyrites in the same lode on the 500 being exceedingly good. On the other hand, the lode in this lower level is far stronger than that in the 500. We have risen 5 feet. We have on hand at date 296 bags of rich ore.

BRITISH BROKEN HILL PROPRIETARY.—Mining manager's report for week ending June 30:—Blackwood shaft, 100 feet level. The stopes in east vein yielded the usual supplies of lead ore. Are now stoping in southern section on 4th, 5th, and 6th floors, which are yielding carbonate ore as required. Long west crosscut lengthened 16 feet, making total length 299 feet, and stopped. Are now preparing to uprise for connection with surface. This uprise will be used as a tailing chute. The contractors in the east vein above this level have broken 92¾ tons, averaging 43 per cent. lead and 5 ounces silver per ton. The stopes just below this level yielded 44½ tons lead carbonates, averaging 42 per cent. lead and 6 ounces silver per ton. From the southern section 138 tons were broken, averaging 25 per cent. lead and 10 ounces silver per ton.—Howell shaft, 1 0 feet level, far north stopes. Are working in splendid faces of carbonate ore on various floors going northwards, good supplies being won for milling purposes. We mined 207 tons, averaging 32 per cent. lead and 3 ounces silver per ton.—200 feet level. We mined 208½ tons, averaging 33 per cent. and 5 ounces silver per ton.—300 feet level. Are still putting leading sets in position on sill, second and third floors off east crosscut, good faces of sulphide ore being opened up. We broke 14 tons sulphide ore, averaging 28 per cent. lead, and 6 ounces silver per ton, and 17 per cent zinc.—Tailings drive. The drive started from uprise, in far north stopes for connection with tailings tramway was driven 32 feet.—Surface, Electric light. Good progress made on installation inside jig plant on lower jig floors.—Jig plant. Erection of buddles and extension of tailings tramways being pushed ahead with all dispatch. Have also commenced work of extending concentrates bagging floors. Mill ran very satisfactorily during week; started running on three shifts last Monday.—Week's assays. Carbonates, lead from 15·5 to 50 per cent., silver from 1·6 to 24·3 ounces per ton. Sulphides, lead from 24·5 to 33 per cent., silver from 4·3 to 7·8 ounces per ton, and zinc from 13·5 to 21·8 per cent.

BAYLEY'S WEST EXTENDED.—Mine manager reports, under date Coolgardie, June 24, as follows:—As mentioned in my last report, I am stoping ore on hanging wall of reef, it being heavily charged with pyrites, and contains small patches of gold. I am carefully bagging all payable stone.

CHAFFERS.—The following report dated July 7, has been received from the company's managers, Messrs. Bowes, Scott, and Co., Coolgardie: No. 1 shaft, 55 feet level south drive. Drive 23 feet, total 44 feet. Vein 9 inches, pannings show 6 to 8 dwts. of gold. There is no change to report in this drive. It continues to look a strong lode, but runs only a few dwts. to the ton.—No. 1 shaft, 55 feet level winze. Drive 10 feet. Vein 1 foot 6 inches, pannings 15 to 20 dwts. gold. The stone at the bottom of this winze is not quite so good as it was. At one time it looked very favourable, and gold could be detected occasionally with the eye. The stone consists of a hard quartz and bands of ironstone.

CONSOLIDATED MURCHISON.—Extracts from mine manager's report dated July 6: Day Dawn and Dav Dawn north. The 150 feet level has been extended 10 feet during fortnight. The reef in face, which had pinched to 18 inches, is now widening out again and is showing gold.—Day Dawn west. The main shaft has been sunk 20 feet during fortnight. We are working with three shifts, and are baling 2000 gallons water per 24 hours. Shaft 7 has been sunk a further 10 feet, and new air shaft west of No. 7 5 feet. In both shafts the quartz is improving in the bottom. The 59 feet level has been extended 56 feet east.

CRESCENT.—Fortnightly report of Mr. T. G. Davey, superintendent, dated July 3:—Crescent Mine. Rise at back of drive north of tunnel B advanced 18 feet 6 inches, total 39 feet. Lode continues large, but is, so far, non-auriferous. The contractors are not making as much progress as they should do, and unless they do better this week I shall cancel the contract and call for fresh tenders. The ground is very favourable for rising.—Victory Mine. Extension of tunnel E towards western lode advanced 18 feet, total 35 feet 6 inches. We have just reached what appears to be the western lode. It is fairly well mineralised, and carries "colours" of gold. When the tunnel has been extended a few feet further we shall commence to drive north and south on this lode.—Drive south of tunnel E on main lode advanced 8 feet, total 218 feet. Lode formation 2 feet wide and somewhat auriferous, but not yet payable. Crosscut east and near end of same drive extended 8 feet. Ground fairly hard, but much disturbed. The stopes are gradually becoming poorer as we approach the upper workings as was anticipated would be the case. We have just commenced to sink below the drive south of tunnel east, where the lode is 2 feet wide and valued at 1¼ ounce of gold per ton.—Chance Mine. Drive south of tunnel on Howard's eastern lode advanced 25 feet 6 inches, total 146 feet. Lode has widened to 4 feet, and is slightly auriferous throughout.—Orlan to Mine. Drive south of tunnel P towards main shoot, extended 8 feet, total 63 feet. Lode 4 feet wide, and highly mineralised but not yet auriferous.—Mill. The battery and concentrating machinery continues to work most satisfactorily.

CONTINENTAL AND WESTERN AUSTRALIAN TRUST.—The following advices have been received by mail from Mr. Edward Hooper, the company's manager in Western Australia: Egerton leases, Broad Arrow. Have returned from a tour of inspection in this district. These leases are developing well. Average samples taken from the 100 feet level yielded an assay 2 ounces 3 dwts. per ton of stone.—Maori King lease, Broad Arrow. Have also inspected this. It is a property of great promise, and is being actively developed on your behalf. Reef is 3 feet 6 inches wide, and samples averaged 3 ounces per ton. Have taken up the adjoining property, consisting of 16 acres. The mine is close to the Paddington Consols, on the same line of reef.

CRESSUS NORTH No. 1.—The following is taken from the mine manager's report, dated June 27: At the main shaft we have sunk 6 feet for the week and timbered 10 feet. Sinking is in hard diorite rock, and the amount of water is increasing. The men from the No. 2 shaft have been put to cut a chamber, and plat at the 130 feet level from which to drive west to intersect Block 46 lode and the Green lode. The following is taken from the mine manager's report, dated July 4: During the week we have sunk a further depth of 5 feet in the main shaft, and timbered it to within a few feet of the bottom, total depth 233 feet. Water makes more freely through the joints of the rock, which is very hard diorite and difficult to shoot. A chamber has been opened at the south side of the shaft at the 130 feet level, and has been driven 6 feet for the week.

GREAT FINGALL REEFS.—Report for the week ending June 27: No. 1 shaft, 80 feet level, north drive on reef B. Reef pinched out. Abandoned. North drive on reef A, reef 3 inches wide. Too small to be of any value.—No. 3 shaft (main), 102 feet level, south drive on reef E. Reef averages 1 foot. No improvement in gold value.—No. 8 shaft, 50 feet level, north drive on reef. Reef 1 foot wide. Poor in gold.—South drive on reef. Reef 2 feet in width. Pyrites showing freely in the stone. The reef in both the north and south drives has opened up considerably in size, but there is no corresponding improvement in value.—Erection of plant. The poppet heads have been well braced, stayed, and bolted together, and are now complete. The alterations to the mining cages have been completed, effecting a reduction of 3 cwts. in the weight of each cage. The building in of the boilers is proceeding well. The feeding floors have been further built up during the week. We have reduced hands on construction work.—G. W. W. Mackinnon, mine manager.

HARRIETVILLE.—Fortnightly report of Mr. F. G. Davey, superintendent, dated July 3: Tiddledee Mine, Bibby's new lode. Rise at back of drive north of tunnel F advanced 34 feet, total 110 feet. This rise has been put up on the hanging wall portion of the lode, and on crosscutting 5 feet into the western side, communication has been made to the 100 feet below the surface. The lode just at this point is 17 inches wide and valued at 2 ounces of gold per ton. We are now crosscutting for the footwall or auriferous portion of lode from a point 80 feet down the rise and hope to start stoping from there in a day or two and to be able to commence crushing forthwith. Drive north of tunnel E on Bibby's lode extended 8 feet, total 41 feet. Lode 1 foot wide, and valued at 8 dwts. per ton, gold being visible in the stone. Rise at back of same level advanced 11 feet, total 25 feet. Lode small and poor.—Saint Bernard Mine. Owing to the dangerous state of the ground about the drive north of the Pennsylvania shaft, which is alongside of the old workings, I have put the men to drive a little westerly to intersect the auriferous vein mentioned in my report of May 22.

IMPERIAL WESTERN AUSTRALIAN CORPORATION.—The directors have just received the following latest information from the managers of their various properties in Western Australia: Western Shaw. Reports just to hand by mail give the following information respecting the Western Shaw properties: No. 1 tunnel (lease 21). Have had men engaged during the fortnight in putting in timber ready for stoping and in laying tramline along tunnel and levels, and am now ready with 100 feet for stoping.—No. 2 tunnel north drive. Have put this drive in a total distance of 105 feet. The lode here has widened to 3 feet.—South drive. Have put this drive in a total distance of 125 feet. The lode here is still broken and disturbed.—No. 3 shaft (lease 215). Have continued driving both north and south along lode in this shaft. In the north shaft the lode is about 3 feet wide, and the stone is improving in appearance.—No. 2 shaft (lease 215). Have continued driving north in this shaft at the 40 feet level, and am in a distance of 20 feet. The lode here carries really first-class gold, some of the stone I have forwarded you for inspection.—Boulder Queen and Hesperus Properties (Hannan's). Mr. Seymour, the company's manager on these properties, reports as follows:—On lease 1139 east No. 1 shaft the eastern crosscut was discontinued, and a start was made to drive north along the reef, which is proved to be 3 feet wide of a decomposed nature. On lease 1489 east we have sunk the shaft to a further depth of 15 feet, making a total of 54 feet from the surface. This depth has proved to be water level. We have completed timbering the shaft, and have opened out east and driven a crosscut 20 feet through soft country favourable for a reef.—Gwendoline Properties (Hannan's). Mr. Robert Gibson reports as follows: Lease No. 1638 east shaft sunk to water level 64 feet. At 52 feet from the surface crosscuts have been driven north-east and south-west for a distance of 200 feet through country rock with alternate veins of lode formations varying from 1 to 5 feet in width. Lease 1637 east a shaft has been sunk near the south-eastern boundary to a depth of 70 feet, and a crosscut east has been driven 30 feet through clean country. A lode formation 7 feet in width was passed through in sinking the shaft; it dipped to the west and should be met with in crosscutting from the shaft at about 20 and 30 feet. Lease 1936 E shaft sunk 75 feet, and crosscuts driven north north east and south south west for a distance of 200 feet.—Lease 1935 E. A shaft has been sunk 60 feet and a crosscut has been driven north north east for a distance of 70 feet.—Laffer's Mines (Pilbarra). From the reports recently to hand from Mr. Brenton Symons respecting the above-named properties belonging to the corporation, the mines are being actively opened up and developed, and a letter received from the company's agent in Roebourne states that a Nelson trial crushing will be put through, and that the result may be expected shortly.—Mainland properties. Reports have recently been received respecting the group of properties belonging to this company adjoining the Mainland Consols. They state that the development work which is being actively pushed forward is attended with most satisfactory results.

KAURI FREEHOLD.—We are officially informed that since the Company's Mining Regulations were issued at Auckland on the 7th inst., leases have been applied for, to the extent of 920 acres. These leases will comprise blocks varying from 6 to 10 acres each.

LONDON AND WESTERN AUSTRALIAN EXPLORATION.—The following information is to hand from the manager of the McPherson's Reward Mine, upon which the above company has secured an option: The centre shaft has been sunk 40 feet on a quartz lode, which is intersected by rubbly bands carrying about 1 ounce of gold per ton. The average width of the lode for crushing is 2 feet 4 inches, the quartz yielding nearly 3 ounces per ton. The south shaft is 73 feet down. At 48 feet the lode was 2 feet 9 inches wide and worth fully 3 ounces per ton. At this depth a bar of composite intrusive rock came in from the south and filled the lode channel. This compound was rich upon the footwall, and 55 ounces of gold was washed out of about 1 ton of a hornblendic kaolin seam, which traversed the end of the shaft. After sinking 19 feet the quartz made again very rich, and was found to be over 5 feet in width at this spot, and a crushing of 25 tons yielded 65 ounces 9 dwts., exclusive of rich specimens which had been picked out, and were on exhibit at Coolgardie. In the main shaft water was struck at 130 feet. At 60 feet depth a drive was put in, and cut the lode. This drive has been continued on the course of the lode for 60 feet, and the stone raised is awaiting crushing. I have repeatedly tested it, and value the full width of the lode at 1½ ounce per ton. There is fully 3½ feet of quartz in the face of the drive at present. The mine is situated a little to the south-east of the Lady Loch. An abundant supply of timber and water is obtainable.

LONDON AND WESTERN AUSTRALIAN INVESTMENT.—The secretary writes:—This company has secured three further water rights of 160 acres each at Hannans, upon which developments will be immediately put in hand. These water rights with the others owned by the company will represent the first available belt of water north east of the chief mines at Hannan's, and the combined property is therefore one of great value.

LAKE VIEW AND BOULDER JUNCTION.—Extract from the monthly report of the general manager, Mr. George Gray:—Lease 921 shaft No. 1 west drive driven in 15 days 46 feet. We have been driving to cut the lode, which is running south-east. The country passed through is composed of decomposed diorite with bands of quartz and ironstone leaders running through. We have sampled this stone, and find very fine colours. Shaft No. 2 east drive driven for 24 days 21 feet. The country passed through consists of decomposed diorite with leaders of quartz, considering by the nature of the ground the lode cannot be very far off. Shaft No. 4 north-west drive driven 24 days 18 feet. West drive driven for 24 days 8 feet. Have driven north-west on lode, consisting of quartz and ironstone 5 feet wide; it carries very fair gold. The country passed through in the west drive is diorite. Lease 1046 shaft No. 2 sunk for 18 days 15 feet. Have been sinking on hanging wall lode, composed of slate and ironstone with quartz leaders.—Lease 1160, shaft No. 1. East drive driven 24 days 41 feet. West drive driven 24 days 27 feet. Have cut the lode in the east drive, it is composed of quartz and ironstone, with a considerable quantity of brown precipitate; have panned samples and found it encouraging. Have cut through lode which is 7 feet wide, and am driving another 20 or 30 feet, when expect to cut the most eastern level. The west drive is in decomposed diorite with leaders of ironstone and quartz. Have also put 25 sets of timber in drives.—Lease 921. Two carpenters have been employed on the camp buildings and one man employed as mine manager.

LIMERICK.—On June 27 the manager reports: Lease 1452. Resumed sinking main shaft about a week ago, now down a further depth of 8 feet, total 95 feet. Shaft still in reef with no sign of footwall at present; pump works satisfactorily and we expect during the next month to have the winding gear at work.—Surface. Large quantities of timber have been sawn for centres, skids, and casing of main shaft.—Mr. John Lowles, M.P., who was at the mines, in a letter from him dated July 1 states: I took Mr. Garland, of John Taylor and Sons, to see the property on our way back from Menzies last Saturday, and we spent several hours on the mines. He likes the look of the properties very much, and his examination of the stone on the dumps was satisfactory. . . . We descended the Lost Chord, where they are stoping. Garland liked the look of it immensely, and it ought to crush splendidly. . . . The Baron Sloet von Oldruitenborgh, a Belgian expert, visited the Limerick line the other day and expressed a high opinion of it. He said it was a reef that would live to great depth and amply repay any capital put into it.

MENZIES GOLD ESTATES.—Extracts from mine manager's report, dated June 27:—Aurelia. South shaft is now in 37 feet. North drive, length of level 23 feet.—No. 1 shaft, Aspasia line. The 70 feet level south has been extended 20 feet during the week, present length of level 71 feet. A sample of the quartz taken out in the 20 feet driven assayed 17 ounces 9 dwts. 8 grains per ton. The quartz streak is now 8 inches wide.—No. 2 shaft, Aspasia line. The vein of quartz in 67 feet level south is 8 inches wide. We now have the required timber to make this shaft secure, and the timbering will be done at once. The south drive is now 34 feet from shaft, and is in much tighter ground than we have had before. I shall look for an improvement after we get through this.—Oleone. No. 1 shaft is now down 69 feet, with no change in the country yet.—Etrenna, main shaft. Progress for the week 8 feet, total depth of shaft 37 feet. The ground is getting very much easier for sinking.

MENZIES PIONEERS.—The following is an extract from letter of June 20 from Mr. Ballard, the manager at the mine: Yours of May 15. I am glad the directors agree to develop this mine vigorously. I have every hope that development will support our favourable opinion of this property. We are pushing on the old main shaft to go down for the all-important water with all possible dispatch. I do not expect to cut any vein of importance in this shaft. It is now about 120 feet deep, but in addition to its use as a water shaft I shall require it to crosscut for the main vein opposite it at the lower levels, such vein having already been connected with it by crosscuts at the 40 feet and 174 feet levels. I am making provision for a new main working shaft to be sunk to the eastward of the north-west shaft. Our operations lately have been principally in the crosscut from the said north-west shaft, by which crosscut to the eastward we have struck several important and auriferous veins. The operations in this crosscut have been very successful and point to a permanent mine. Our operations last week crowned the week, for at 91 feet in the crosscut we struck a reef showing nice gold, and at 95 feet we had not yet entirely passed through it. (Latest information received June 25: I am happy to say that this vein assayed 1 ounce 10 dwts. 11 grains for the first 4 feet passed through for the quartz veins in it, and the mullock assayed 3 dwts., which is very encouraging. Further than this I find to-day that the total thickness of this lode is 8 feet at this 99 feet level. I have reason to believe it is the main lode.) I am of opinion that this is probably the main vein which we have already opened from the water shaft, but I shall satisfy myself about this next week. In any case, however, I shall carry the crosscut on for a considerable distance further, because it is very necessary to get a notion of the exact position of all our principal veins in the neighbourhood of the main vein. I venture to predict that at the lower levels we shall have a large vein to work upon, as all these smaller veins what we have cut in the crosscut seem to me to be connected with the main vein, for which the original main shaft was started. I am providing timber for a main working shaft, 9 by 3, to be sunk in the neighbourhood of the north west shaft, but probably 150 feet or so to the eastward of it. This shaft will be used to test the various veins met with in the crosscut and open them out at various levels so as to give us stone for our mill. I would rather not decide upon a mill until I have seen what the quartz is like at the lower levels. I am not afraid of failure, but on the other hand, as I believe this will be an important and permanent mine, I am anxious to see whether the stone forms into sulphides or not before settling about a milling plant. This delay will not be detrimental so long as we can be fortunate enough to expose satisfactory quantities of payable ore. Water also must first be obtained.

MOUNT LYELL MINING AND RAILWAY.—Engineer in charge of mine reports for week ending June 28: No. 1 tunnel, north drive. Distance driven for week 3 feet, total 47 feet. No change.—No. 3 tunnel, main crosscut. A machine drill has been put in and work resumed in this face, and 4 feet 6 inches driven for the week, total 301 feet.—No. 4 tunnel, south drive. Distance driven for week 4 feet, total 518 feet. Face improving.—No. 4 tunnel, south drive, No. 3 crosscut. Distance driven for week 2 feet, total 46 feet.—No. 4 tunnel, south drive, No. 2 rise. Timbering carried on during week.—No. 4 tunnel, south drive, No. 4 crosscut. Work in this face has been discontinued, 1 foot having been driven for week, total 29 feet.—No. 4 tunnel, south drive, No. 3 rise. A small quantity of ore has been stoped from this rise during the week.—Surface work. Benches. The excavation of overburden at No. 1 bench has been continued during the week. At No. 2 bench the breaking of ore for the smelters has been carried on, principally at the northern end. The pyrites are breaking well, and are of good quality. Breaking ore and stripping at the No. 2½ bench has also been carried on. The fitting of the assay office and the erection of a magazine has been making satisfactory progress.—Progress report for week ending June 26:—Hauling line in operation, hauling ore from mine to smelters. Crushing plant in regular operation.—Smelting plant. No. 3 blast furnace successfully blown in on June 23, evening.—Coke. 153 tons received. Weather fine, rainy of late.—Superintending railway engineer reports for week ending June 29:—Heavy rains have set in, fast progress is being retarded. The platelaying on all bridges on the Abt gradients are now completed, and the rails laid on a portion of the valley section, the head of the road being now 4 miles 72 chains from Queenstown.

MOUNT CHARLOTTE.—Manager's report of July 3: Murray's shaft sunk 17 feet, making in all 253 feet; very hard diorite heavily charged with fine arsenical pyrites and numerous fine veins of quartz; the ground altogether looking favourable.—Tweedie's shaft. East drive driven to a length on the lode of 38 feet and a back stope of 18 feet long. 5 feet high worked, giving 20 tons of quartz of an estimated value of 19 dwts. per ton. West drive has been driven on lode 22 feet and produced 17 tons of quartz of an estimated value of 29½ dwts. per ton. The lode in the end is bending rapidly north, and I am doubtful of the gold continuing so good beyond this fault, but this I will prove.—Clay's shaft. North drive now in 86 feet, lode still split, but looks like improving; south drive 32 feet, stone now making here.—Mill. Belt conveyor nearly finished, when I think mill will run smoothly, and enable us to mill steadily.

QUEEN CROSS REEF.—Manager's report for fortnight ending June 23: The No. 1 drive east has been driven 6 feet, total distance from the shaft 174 feet, carrying 6 inches of fair quality stone. The stopes over this drive looks as well as ever, averaging about 20 inches of good quality. No. 2s drive east has been driven 12 feet, total from shaft 67 feet. The reef in this drive has cut out, but think it will come in again, as it looks promising. The stope keeps about 2 feet of good quality stone. The No. 2 drive west has been driven 2 feet, total from shaft 54 feet. This drive has been extended to the boundary with 2 feet 6 inches of good quality stone. Have started a winze in this drive on the Band of Hope boundary. The stope over this drive keeps about the same with 2 feet of good quality stone. The underlie shaft has been sunk 16 feet, total from No. 2 plat 31 feet. The reef looks well with about 2 feet on the eastern side and 20 inches on the western side showing gold freely with other leaders intermixed through the formation. The quantity of stone raised for the fortnight is 145 tons, total in the paddock, 375 tons. We shall start to crush next week. The mine is in good working order.

SULTAN (Coolgardie).—The mine manager reports under date, Coolgardie, as follows: No. 2 shaft. The chamber for winze is complete and timbered, and winze has been sunk 2 feet. There is a good solid quartz reef 2 feet wide showing in winze.

TRUE BLUE (Hannan's).—Mining manager's report to week ending July 4: Shaft A has been sunk a further depth of 5 feet, total depth from surface still 149 feet. From the layers of the country in X A. 1, I do not anticipate that this bar will be continuous.—No. 1 vein. The north drift has been extended 4 feet, total distance driven from X.A. 1, 29 feet. For the last 10 feet of driving the ground has been broken. I have for the present suspended operations in the drift. The south drift has been timbered, and the ground at the bottom of No. 1 winze from No. 1 level, shaft C secured, and ladder road fixed in winze from crosscut of prospecting shaft. On completion of this work I started to raise. Above the back of the level the lode widened to 2 feet 6 inches in thickness, consisting of quartz stringers, varrying in width from 2 inches to 10 inches, and carrying visible gold. The formation intermixed with these leaders carries a little gold. I shall push on this raise as speedily as possible, and am hopeful that it may lead to the opening up of a bush of payable ore.—No. 2 vein. The south drift has been driven 15 feet from X.A. 1. The lode and formation is about 10 inches in thickness.—No. 3 vein. The south drift has been extended a further distance of 28 feet, total distance driven from X.A. 1, 54 feet. The lode and formation is about 15 inches in thickness.—X.A. 1. I shall as soon as possible sink a prospecting winze to a depth of 50 feet. Good class of formation at this point underlying towards our leases. Shaft B X.B. 2 has been driven 30 feet from the shaft. The last 10 feet in lode bearing formation full of ironstone stringers.—Shaft D. The eastern crosscut has been extended a further distance of 42 feet, total length of crosscut 55 feet. There is no change to report.—Shaft E, X E. 1, has been extended 40 feet, total distance driven from the shaft 253 feet. In the end we passed through a lode formation of schistose and quartz stringers, about 3 feet in thickness between well-defined walls. When the crosscut has advanced sufficiently far to enable the men to work with safety I shall open out on the formation north and south.—Shaft F, X.F. 1, has been driven a further distance of 16 feet, total distance from shaft 27 feet, at which point the Jubilee lode was cut through. It is about 18 inches in thickness of poor quality stone.—General. A total of 186 lineal feet of underground exploratory work has been accomplished during the fortnight. The prospects of the mine generally have improved. No. 1, No. 2, No. 3 veins in the True Blue sections looking much better, and X.E. 1 and X.B. 1 looking more promising than formerly.

VICTORIA AND QUEEN.—Manager's report for fortnight ending June 23: Have driven the No. 4 drive a further distance of 16 feet, making a total of 122 feet 6 inches. The reef is about 6 inches. The back stopes in this drive average about 1 foot of stone. The bottom stope about 1 foot of very heavy mineral stone. The winze in No. 3 crosscut has been sunk a further depth of 25 feet, making total 70 feet. Passed through a leader about 6 inches at 65 feet. The winze in the underlie has been sunk a further depth of 12 feet, making total 61 feet. Have not got the reef yet. Have driven the No. 3 drive a distance of 14 feet, making total 214 feet. The reef is about 15 inches of fair quality stone. Have started the machine in the leading stope of this drive and it is working well. The winze in No. 3 has been sunk a further depth of 5 feet 6 inches, making a total of 53 feet. The underhand stope in the intermediate drive No. 3 averages about 15 inches of heavy mineral stone. Have started a machine in the back stopes No. 1. The reef is about 1 foot of about 25 dwts. stone. Hauled during the fortnight 80 tons, making a total of 280 tons at grass. The engine and air compressor are working well and giving every satisfaction.

VICTORY (Charters Towers).—Mining manager's report for fortnight ending June 27: No. 2 shaft. The 320 feet level has been driven west 10 feet for nine days, total length of this drive 400 feet. The country we are driving in at present is all diorite. No. 7 level has been driven a further distance of 6 feet, total 360 feet. There are several leaders showing in the present face carrying fair mineral, these leaders making towards hanging wall. The formation is hard, but I think from present appearance we are not far from a reef. The reef in rise at No. 1a is still keeping small, from 3 to 10 inches, quality about the same. 15 tons have been hauled from this shaft for the fortnight, total in hopper 31 tons.—No. 3 shaft. No. 2 level has been driven east a further 23 feet, total 80 feet. About 10 inches of fair looking stone showing in the face. The western drive at this level has been driven 21 feet, total 80 feet; 9 inches of reef showing in the face, quality poor. In the stopes at the back of No. 1 east the reef is from 8 to 20 inches. Some places breaking very well, other parts white and poor. Have started a winze in the end of No 1 east, am down 6 feet; 20 inches of reef in bottom, good quality. 26 tons have been hauled from this shaft, making 122 tons towards present crushing. There has been no work done underground at No. 2 shaft for the last three days, but will start again on Monday. At No. 3 shaft there has been one day's stoppage. Have started this week putting in straight shaft. Expect to have the trucks working about the middle of coming week.

WAIHI SILVERTON EXTENDED.—The mine manager and local board reports on July 9, as follows:—From mine manager. A start was made about a fortnight ago to drive on what appears to be the junction of the No. 3 reef with the Silverton reef, and after a short distance had been driven, a band of ore of very promising appearance was cut. We have since been driving on it, but owing to the very hard nature of the country very slow progress is being made. A sample taken from 3 feet wide, when it was first cut, showed an assay value of £3 10s. per ton, and a sample taken on July 7, showed a value of £3 3s. 2d. per ton. Two samples taken on the 9th gave a value of £1 14s. 8d. per ton. At present the seam does not look as well as it did when first cut. I purpose continuing the drive going west on the No. 3 reef next week. During the month 803 tons of quartz have been broken out, and put in the kilns, and 777 tons have been taken from the kilns to the battery. Judging from the value of the quartz crushed during the first crushing as compared to that treated during the second month, and seeing that the first came from the drive, and the second from the stopes above, there is no doubt that your reefs improve in value as they go down, and that in your next level you should have a much higher grade ore. Taking into consideration these facts, I would strongly urge upon you the necessity of sinking your main shaft for another lift of (say) 80 feet. That the returns have not been up to what we anticipated there is no question, but that they are much more than payable is also without doubt. Our only solution of the circumstance is that the gold runs, or auriferous deposits, are found in flat runs—horizontal floors—and that having so large a lode as 30 feet to break down, we have no chance of moving on to where we know there is richer ore—in other words we are crushing all before us. Of course, if we had double the number of stamps these variations would not be so keenly felt. It will be very difficult to keep always to one regular value. We are and shall continue to do our best to equalise matters, but with our present plant of 40 head we cannot win an average close enough to determine actual regularity. We know there is some exceedingly rich ore ahead in the stopes, but we cannot reach there for some time at our present rate of progress.

WOODSTOCK GOLD (New Zealand).—The mine manager's report of July 8, just received, states as follows:—Maria lode, No. 1 level. North of the crosscut the lode averages 3 feet in thickness; the whole of the ore is worth £3 10s. assay value. Specifications are now being got out preparatory to calling tenders for driving a crosscut eastward of the lode, in which direction, judging from surface indications, I think another lode will be met with in about 50 feet. Good headway is being made with the intermediate crosscut, which is now passing through good country, and we should meet with Shepherd's lode shortly.—No. 2 level, since writing my last report the lode has been driven upon southwards 33 feet. It varies from 3 to 5 feet in thickness, and averages £5 12s. per ton. Here we have still got 50 feet to drive before we meet with the Hauraki rich shoot now being worked in No. 3 level, and I expect to have it in hand before writing my next report.—No. 3 level. Here the matter is still very hard. During the past 10 days the average assay value of the ore here has been £3 18s. Of late in same place contractors have broken out this lode to a width of 7 feet without any sign of footwall, and, therefore, its actual size is still a sealed book to all concerned. Our object is not breaking out to full width at present is to economise in the matter of timber.—No. 4 level. Here the three lodes have come together, forming a large body of ore, which are now breaking out to an average width of 5 feet, without any sign of a hanging wall, and the footwall is only visible occasionally. Some of the crosscut and foot and hanging wall branches converge towards the rich portion, pinching it down to 6 inches. Ore samples from this vein have assayed as high as £100 a ton, while the balance of the ore-body is only worth £1 4s. a ton. Within the last 10 feet the rich ore has been widening out steadily, and it is now fully 4 feet thick, and the average value has gone up to £1 6s.—No. 5 level. Last week we cut into the hanging wall country from the level, and after driving about 12 feet struck a lode, which I believe will eventually prove to be the Marie. Within 50 feet we shall be up to and immediately below the point where the rich ore was left under foot in the No. 4 working, and then we hope to have plain sailing.

WEST AUSTRALIAN GOLD CONCESSIONS.—Talisman East (Black Flag) (Limited), week ending June 27: Four men have been employed driving at

the 50 feet level, advanced 14 feet. Have cut four leaders carrying a little gold. Expect to cut main reef in a few days.—For week ending July 4: Four men have been employed for the past week prospecting the large reef on the southern boundary; the reef averages 6 feet wide, and carries fine gold.—Meteor (Black Flag) (Limited), June 27: Four men employed driving on the reef at 65 feet level. The reef has extended out to 4 feet.—Ajax (Black Flag) June 27; There are four men employed on this lease driving at the 75 feet level. The stone shows coarse and fine gold freely.—Hannan's Golden Dyke Mines (Limited). No. 1 shaft has been sunk an additional 2 feet, making a total of 55 feet. At this level rich gold has been struck in bands of quartz running through the quartzite formation. I consider this a most important development, and am still sinking in order to prove the extent of the chute of gold.

INDIAN.

BALAGHAT MYSORE.—Report for the fortnight ending July 18: Ogle's shaft. The 410 feet level from the crosscut east has been driven south 9 feet 6 inches, total distance 19 feet, and the quartz 2 inches wide assays 3 dwts. 6 grains of gold per ton. The 410 north has been extended 12 feet from the crosscut east, total distance 23 feet 6 inches. Quartz stringers here assay 2 dwts. 15 grains. This drivage has now been suspended, and the crosscut east will be driven a little further to ascertain whether any more lode is to be found in that direction.—Haines' shaft. The 410 feet level north has been driven 4 feet, total distance 204 feet from the shaft. Lode 4 feet wide assays 2 dwts. of gold per ton.—Health. The camp is free from sickness at the present time.—Thomas Richards.

MYSORE REEFS (Kangundy).—Mine report for fortnight ending July 21:—Underlie Shaft. 580 feet level north has been extended 10 feet, now 49 feet from shaft. The lode is 2 feet wide, assaying 15 dwts. 7 grains of gold to the ton. The shaft men have been engaged cutting tip plat, and cutting ground for winding engine. We hope to complete this on the 24th inst., and shall resume the sinking of shaft at once. Winze below intermediate level has been sunk 6 feet, now 23 feet below the level. The lode is 2 feet wide, assaying 1 ounce 17 dwts. 8 grains of gold to the ton.—Stope above this level. The lode is 1 foot 6 inches wide, assaying 1 ounce of gold to the ton. Vertical shaft has been sunk 10 feet 6 inches, which is its total depth below the 425 feet level. The quartz is 9 inches wide, assaying 13 dwts. 18 grains of gold to the ton. We have stopped the sinking of this shaft, and put the men to cut plat. As soon as this is completed we shall resume the sinking of the shaft again. 425 feet level north has been extended 13 feet, now 23 feet 2 inches from shaft. The lode is 2 feet wide, assaying 1 ounce 2 dwts. of gold to the ton. Two stopes below this level north of underlie shaft, average width of lode 1 foot 6 inches, assaying 1 ounce 5 dwts. of gold to the ton. 260 feet level south of east crosscut has been extended 12 feet 6 inches, total distance 14 feet 6 inches from crosscut. The lode is 3 feet wide, assaying 10 dwts. 18 grains of gold to the ton.

MYSORE.—R. Hancock: Mining operations for the fortnight ending July 20—Rowse's shaft 1460 feet level north of the crosscut west. We have started a winze in the bottom of this level under the rise, sunk 4 feet. The lode is 1 foot 6 inches wide, no assay made yet. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 1 ounce 7 dwts. 10 grains.—1460 feet level north of sump winze.—The crosscut east from this level has been driven 23 feet, making a total distance driven of 89 feet. There are three stopes in the back of this level, the average width of the lode being 4 feet 8 inches, giving an average assay of 1 ounce 5 dwts. 12 grains.—1360 feet level south of crosscut. This level has been driven 11 feet, making a total distance driven of 391 feet 9 inches. The lode is 1 foot 6 inches wide, assaying 1 ounce 3 dwts. 6 grains. The winze in the bottom of this level has been sunk 3 feet, making a total depth of 14 feet 6 inches. The lode is 2 feet wide, assaying 13 dwts. 1 grain. There are six stopes in the back of this level, the average width of the lode being 3 feet 6 inches, giving an average assay of 18 dwts. 14 grains.—1360 feet level north of crosscut. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 2 dwts.—1360 feet level north of sump winze. There are two stopes in the back of this level, the average width of the lode being 2 feet 3 inches, giving an average assay of 10 dwts. 4 grains.—1360 feet level north of sump winze north of crosscut. This level has been driven 15 feet, making a total distance driven of 61 feet. The lode is 4 feet 6 inches wide, assaying 1 ounce. The rise in the back of the crosscut (north-east level) has been put up 7 feet, making a total height of 29 feet. The lode is 5 feet wide, assaying 1 ounce 6 dwts. 3 grains.—1360 feet level north of sump winze, south of crosscut. This end has been driven 20 feet, making a total distance driven of 66 feet. The lode is 5 feet wide, assaying 1 ounce 12 dwts. 16 grains.—1360 feet level south of sump winze. There are two stopes in the back of this level, the average width of the lode being 3 feet 6 inches, giving an average assay of 16 dwts. 15 grains.—1260 feet level north. There are four stopes in the back of this level, the average width of the lode being 1 foot 10 inches, giving an average assay of 1 ounce 7 dwts. 13 grains.—1260 feet level north of crosscut. This end has been driven 18 feet, making a total distance driven of 280 feet. The lode is 4 feet wide, assaying 1 ounce 11 dwts. The rise in the back of this level has been put up 15 feet, making a total height of 62 feet. The lode is 3 feet wide, assaying 1 ounce 4 dwts.—1260 feet level south of crosscut. The rise in the back of this level has been put up 15 feet, making a total height of 107 feet, and holed to the 1160 feet level south of crosscut.—1260 feet level south. The crosscut west from the end of this level has been driven 10 feet, making a total distance driven of 37 feet. A branch of quartz has been intersected, and we have commenced to drive south on it. Driven 3 feet. The quartz is 4 inches wide, assaying 3 dwts. 6 grains. There are three stopes in the back of this level, the average width of the lode being 1 foot 4 inches, giving an average assay of 16 dwts. 14 grains.—1160 feet level north. The lode in the stope in the bottom of this level is 1 foot wide, assaying 6 dwts. 12 grains.—1160 feet level north of crosscut. This end has been driven 18 feet, making a total distance driven of 283 feet. The lode is 5 feet wide, assaying 1 ounce 10 dwts. We have started a rise (No. 3) in the back of this level 132 feet north of No. 2 rise. Risen 3 feet. The lode is 5 feet wide. No assay made yet. There are two stopes in the back of this level, the average width of the lode being 7 feet, giving an average assay of 1 ounce 19 grains.—1160 feet level south of crosscut. The rise in the back at the end of this level has been put up 16 feet, making a total height of 89 feet, and holed to the 1060 feet level south of crosscut.—1060 feet level south. There are six stopes in this level, the average width of the lode being 1 foot 5 inches, giving an average assay of 15 dwts. 9 grains.—North of the crosscut east. The lode in the stope in the back of this level is 2 feet wide, assaying 1 ounce 5 dwts. 6 grains.—1060 feet level north crosscut east. This has been driven 9 feet, making a total distance driven of 96 feet 8 inches.—620 feet level south. There are two stopes in the back of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 12 dwts. 14 grains.—Crocker's shaft. This shaft has been sunk 18 feet, making a total depth of 149 feet below the 1060.—890 feet level north crosscut east. This has been driven 15 feet, making a total distance driven of 97 feet 6 inches. There are two stopes in the back of this level, the average width of the lode being 3 feet, giving an average assay of 2 ounces 3 dwts. 1 grain.—890 feet level south. There are five stopes in the back of this level, the average width of the lode being 5 feet 1 inch, giving an average assay of 1 ounce 8 dwts. 14 grains.—780 feet level south. The rise in the back of this level has been put up 10 feet, making a total height from the back of No. 6 stope of 66 feet 8 inches. There is nothing here to report. There are nine stopes in the back of this level, the average width of the lode being 4 feet 4 inches, giving an average assay of 18 dwts. 2 grains.—620 feet level south. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 1 ounce.—Gilbert's shaft, 900 feet level north. This level has been driven 14 feet, making a total distance driven of 26 feet. The lode is 3 feet 6 inches wide, mixed, containing a little quartz, assaying 2 dwts. 14 grains. The crosscut west from the shaft at the 900 has been driven 11 feet, making a total distance driven of 40 feet 6 inches.—650 feet level north, crosscut east. This has been driven 10 feet, making a total distance driven of 75 feet 6 inches.—650 feet level south. This level has been driven 17 feet, making a total distance driven of 179 feet 6 inches. Lode is 3 feet wide, assaying 4 dwts.—520 feet level north. There are three stopes in the bottom of this level, the average width of the lode being 2 feet 10 inches, giving an average assay of 7 dwts. 8 grains.—520 feet level south. The winze in the bottom of this level has been suspended.—470 feet level north. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 14 dwts. 8 grains.—290 feet level north. There are three stopes in this level, the average width of the lode being 1 foot 7 inches, giving an average assay of 1 ounce 3 dwts. 15 grains.—180 feet level south. There are two stopes in the bottom of this level, the average width of the lode being 2 feet, giving an average assay of 7 dwts. 22 grains.—Tennant's shaft. 760 feet level north of crosscut west. This level has been driven 15 feet 6 inches, making a total distance driven of 501 feet. The lode is 8 inches wide, assaying 6 dwts. 12 grains. The winze in the bottom of this level has been sunk 3 feet, making a total depth of 78 feet. The lode having become small and poor, the sinking has been suspended.—750 feet level south of the crosscut west. This has been started and driven 7 feet. The lode is 1 foot wide, mixed, assaying 2 dwts.—520 feet level north. The lode in the stope in the back of this level is 2 feet 6 inches wide, assaying 1 ounce 5 dwts. 340 feet level north south of crosscut. There are two stopes in the bottom of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 17 dwts.—Schaw's shaft, 320 feet level north. There are 2 stopes in this level, average width of lode being 2 feet, giving an average assay of 2 dwts. 23 grains.—McTaggart's shaft. This shaft has been sunk 9 feet 3 inches, making a total depth of 143 feet 11 inches below the 650. The lode is mixed, no assay made.—790 feet level north. This has been started and driven 7 feet. The lode is 5 feet wide, assaying 5 dwts. 5 grains.—650 feet level north of the crosscut west. This level has been driven 1 foot 10 inches, making a total distance driven of 40 feet 10 inches.—560 feet level north. This level has been driven 1 foot, making a total distance driven of 414 feet 11 inches.—560 feet level south of crosscut west. This level has been driven 12 feet 9 inches, making a total distance driven of 475 feet 6 inches. The No. 1 winze in the bottom of this level has been sunk 6 feet, making a total depth of 88 feet 6 inches, and holed to the 650 feet level south of crosscut. The lode in the stope in the bottom of this level is 1 foot wide, assaying 3 dwts.—450 feet level north. There are four stopes in this level, the average width of the lode being 11 inches, giving an average assay of 18 dwts. 6 grains.—450 feet level south. The lode in the stope in the back of this level is 4 feet wide, assaying 4 dwts. 13 grains.—320 feet level south. The lode in the stope in the back of this level is 2 feet 6 inches wide, assaying 4 dwts.—Prospect shaft No. 2. This shaft has been sunk 3 feet 6 inches, making a total depth of 136 feet 3 inches.—Ribblesdale's shaft, 1620 feet level north. This level has been driven 14 feet, making a total distance driven of 46 feet.—1520 feet level north. This level has been driven 17 feet, making a total distance driven of 290 feet. The lode is 4 feet wide assaying 2 dwts. 14 grains. The rise in the back of this level has been put up 16 feet, making a total height of 44 feet. The lode is 2 feet wide, assaying 3 dwts. 22 grains.—Crosscut west from the 1000. This has been driven 2 feet 6 inches, making a total distance driven of 247 feet 6 inches. Not having met with anything further, we have started to drive north on the lodey matter passed through at 200 feet west of the shaft, driven 11 feet.—Williams's shaft, crosscut east from the 173 south of the crosscut. This end has been driven 7 feet, making a total distance driven of 10 feet. The lode is 6 inches wide, assaying 2 dwts. 14 grains. Health good.

MYSORE WEST AND MYSORE WYNAAD CONSOLIDATED (Tank Mine).—Half-monthly report to July 15: South shaft. We have put in all the plat timbers at the 507 level, and have fixed an air winch to draw stuff from the sink. The hopper is completed, and we have begun to clean up the bottom of the shaft preparatory to sinking, and hope to commence sinking in the course of a week or so.—507 level. No. 1 drive north on west lode has been driven to a distance of 150 feet 6 inches, progress 12 feet 6 inches. The lode in the end is 2 feet wide, and is worth 4 dwts. per ton.—507 level. No. 2 drive south on east lode is in 136 feet, progress 11 feet 6 inches. The lode is 2 feet 6 inches wide, and is worth 8 dwts. per ton.—507 level. No. 3 drive north on east lode has been carried to a distance of 130 feet, progress 15 feet 6 inches. The quartz is 4 feet wide, and is worth 8 dwts. per ton.—507 level north on east lode. No. 1 rise has been risen 19 feet, progress 5 feet 6 inches. The rise is all in quartz, but is very hard, and is worth 4 dwts. per ton. Walker's shaft is down 88 feet 6 inches, progress 3 feet. We are starting boring machines in this shaft to morrow.

NINE REEFS.—Mine report for fortnight ending July 20: Oriental lode, main shaft. This has been sunk 7 feet, total depth below the 310 feet level is 90 feet. We shall now start to drive north and south on the lode, which is 5 feet wide, composed of quartz, arsenical pyrites, and small stringers of black rock, assaying 3 dwts. 14 grains of gold per ton.—310 feet level north of main shaft. This has been extended 22 feet 6 inches, total distance 298 feet. The lode has greatly improved here, and is now 5 feet wide, composed of quartz and arsenical pyrites throughout, assaying 4 dwts. 7 grains of gold per ton.—The 310 feet level south of Baynard's shaft. This has been extended 27 feet, total distance 207 feet 6 inches. This drive is passing through the dyke.—Morrison's shaft. We are now engaged in putting down skiproad.—New Water shaft. 2 feet only have been driven in the crosscut, owing to the want of coolies. The health of the camp continues good.

NUNDYDROOG.—Thomas Richards: Report for the fortnight ending July 14: Kennedy's shaft. No progress made. The sinking of the shaft has been interfered with, owing to difficulties in dealing with the water. The 700 crosscut west has been extended 9 feet 6 inches, total distance 119 feet 6 inches from the shaft. Some stringers of quartz intersected at this point assay 2 dwts 12 grains of gold per ton. The 700 north has been driven 9 feet 9 inches, total distance 136 feet. Lode 6 inches wide, assays 2 dwts. 12 grains. The 700 south has been driven 10 feet, total distance 109 feet. Lode 1 foot wide assays 2 ounces 15 dwts. The crosscut east from this level has been extended 5 feet 3 inches, total distance 15 feet 6 inches. No further portion of the lode having been met with in this direction, this crosscut has been suspended. The 600 south has been driven 11 feet 3 inches, total distance 394 feet 3 inches. Lode assays a trace of gold. In two stopes in the back of the 520 south the lode averages 3 feet 6 inches in width, and 2 ounces 15 dwts. in assay value. The lode in the stope in the back of the 440 north is 10 feet wide, and assays 2 ounces 2 dwts. 12 grains. The 440 south crosscut west has been extended 13 feet, total distance 224 feet. No change. The level north from the 370 north crosscut west has been driven 8 feet, total distance 23 feet. Lode of no assay value. In two stopes in the back of the 370 north the lode averages 5 feet 6 inches in width, and 1 ounce 15 dwts. 15 grains in assay value. The lode in two stopes in the back of the 370 south averages 4 feet 6 inches in width, and 1 ounce 10 dwts. in assay value. The 300 north has been driven 12 feet 6 inches, total distance 467 feet 6 inches. Lode assays a trace of gold. The rise in the back of this level has been put up 11 feet 9 inches, total height 72 feet 6 inches. Lode 6 inches wide, assays 2 ounces 15 dwts. In two stopes in the back of the 300 south the lode averages 2 feet in width, and 2 ounces 1 dwt. 21 grains in assay value. The 230 north rise has been put up 19 feet 3 inches, total height 39 feet. Lode 4 inches wide, assays 10 dwts. The 230 south has been driven 12 feet 6 inches, total distance 393 feet 6 inches. Lode 2 inches wide, assays 6 dwts. 6 grains. In the stope in the back of the 160 north the lode is 1 foot wide, and assays 5 dwts. North shaft has been sunk 7 feet 6 inches, total depth 71 feet 9 inches below the 600 feet level. Lode 2 feet 6 inches wide, assays 8 dwts. 18 grains. The new vertical shaft has been sunk 11 feet, total depth 160 feet below surface. Main shaft has been sunk 1 foot 9 inches, total depth 27 feet 6 inches below the 1160 feet level. The 1160 feet level north has been driven 22 feet 6 inches, total 183 feet. Lode 3 feet 6 inches wide, assay 2 ounces 10 dwts. The rise in the back of this level has been put up 14 feet, total height 20 feet. Lode 2 feet wide, assays 2 ounces 7 dwts. 12 grains. The 1160 feet level north from the 1080 north winze has been driven 14 feet, total distance 18 feet. Lode 4 feet 6 inches wide, assays 2 ounces 15 dwts The same level has been driven 14 feet 6 inches southward from the winze, total distance 18 feet 6 inches. Lode 4 feet wide, assays 3 dwts. 3 grains. A rise commenced in the back of the 1080 north at 325 feet from the shaft has been put up 16 feet. For the first 7 feet the lode (quartz) 2 feet wide, assayed 2 ounces of gold per ton, but above that has proved of no assay value. In the stope in the back of the 1080 north the lode is 4 feet wide, and assays 2 ounces 10 dwts. The lode in the stope in the back of the 1000 north is 8 feet wide, and assays 1 ounce 7 dwts. 12 grains. In the stope in the back of the 920 north the lode is 4 feet wide, and assays 7 dwts. 12 grains; and in the 920 south bottom stope it is 3 feet wide, assaying 15 dwts. The 680 north crosscut west has been extended 14 feet, total distance 24 feet. A few quartz stringers have been intersected. The 520 north crosscut east has been driven 12 feet, but no lode has yet been met with. The 370 north has been driven 14 feet 3 inches, total distance 222 feet. Lode of no assay value.—Taylor's shaft. The 1240 north has been driven 8 feet 6 inches, total distance 315 feet. The lode, consisting of stringers of quartz, assays a trace of gold. In the stope in the back of the 1160 north the lode is 3 feet wide, and assays 10 dwts. The lode in the stope in the back of the 1080 north is 3 feet wide, and assays 1 ounce 5 dwts. In two stopes in the back of the 1000 north the lode averages 2 feet 9 inches in width, and 4 dwts. 16 grains in assay value. In two stopes in the back of the 920 north the lode averages 1 foot 6 inches in width, and 5 dwts. 7 grains in assay value. The lode in two stopes in the back of the 840 north averages 2 feet 9 inches in width, and 1 ounce 3 dwts 18 grains in assay value. In two stopes in the back of the 600 north the lode averages 2 feet 6 inches in width, and 6 dwts. 13 grains in assay value. In the stope in the back of the 450 north the lode is 2 feet 6 inches wide, and assays 7 dwts. 12 grains; and in the 230 south back stope it is 2 feet wide, assaying 11 dwts. 6 grains. No. 1 trial shaft has been sunk 12 feet 6 inches, total depth 81 feet. Lode 2 feet (quartz) wide, assays 1 dwt. 6 grains of gold per ton. No. 2 trial shaft has been sunk 3 feet, total depth 68 feet 9 inches. Lode assays a trace of gold.—Old mill samples. Pulp 1 ounce 5 dwts., tailings 4 dwts.—New mill samples, Pulp 1 ounce 3 dwts. 18 grains. tailings 4 dwts. 9 grains.

YERRAKONDA.—Mine report for fortnight ending July 21:—South shaft. This shaft has been sunk 8 feet, now 99 feet below the 255 feet level. The lode is 4 feet wide, of which 1 foot is solid quartz, assaying 13 dwts. of gold to the ton. We have suspended the sinking for the present and have put the rock drills to drive north and south at the 350. The 350 feet level south has been extended 6 feet and the 350 feet level north has been extended 5 feet 6 inches. The lode in both ends is of the same character as the shaft at present. The 255 feet level south has been extended 15 feet, making the total distance from shaft of 247 feet 5 inches. The lode in this end is 1 foot 6 inches wide, composed of schist and small stringers of quartz. Samples taken from the quartz are worth, according to assay, 6 dwts. of gold to the ton.—Health. I am pleased to say the health of the camp is fairly good.

AFRICAN.

AFRICAN ALLUVIAL.—Extract from letters from the superintendent engineer, Mr. Niness, dated June 22 and 26, and July 3:—I calculate the average yield of the alluvial to be from 4 to 5 dwts. per load. We have reached bottom in the new paddock, where the wash is much richer than above. I shall clean up as soon as I possibly can.—Beira Railway. At the rate they are proceeding with the railway the earthworks will soon be finished as far as Macequece.—Note. Cable communication has, since the date of the above letters, been suspended, and the expected cable information has, therefore, not come to hand.

CAPE COPPER.—Captain Henwood, June 30:—Ookiep. The stope in bottom of the 130 fathom level east of winze is still yielding a little saving stuff. The rock in the 68 fathom level south east of No. 16 level having become unfavourable for copper ore it has been suspended. The 68 fathom level south west of south east level has during the month produced occasional stones of copper ore. The 58 fathom level north west of 55 winze is spotted with copper ore, but not to value. The rock in the 58 fathom crosscut south of main west level for the present is unproductive. The stopes throughout the mine continue to yield well.—Captain Henwood, June 30:—Trial Mines. Nababeep south. The 59 fathom crosscut north of No. 1 winze the rock in the upper part of the forebreast is still spotted with copper ore, but the bottom part is quartz, which apparently is dipping eastward, consequently we have started to drive north east to follow up the productive part. There being no improvement in the nature of the rock in No. 3 winze sinking below the 59 fathom crosscut it has been suspended, and the men are put to drive in the 59 fathom level north west from the top of No. 2 winze.—Spectakel. The rock in the 53 fathom crosscut north on No. 1 flookan course still contains spots of copper ore, and the ground in the 53 fathom level east from this point is also spotted with copper ore, but not in sufficient quantities to value.—Copperberg. The rock in the 10 fathom level west of whim shaft is producing occasional stones of copper ore. The stope in the 10 fathom level east of whim shaft is yielding a little saving stuff. The stope in back of the adit level west of No. 1 south crosscut is worth fully 3 tons of copper ore per fathom. The rock in the 30 fathom level west of south crosscut is composed chiefly of gneiss. The ground in the north west end of No. 2 trial shaft is still yielding a little saving stuff.—Ookiep east. The stope in the bottom of the 66 fathom level south and west of winze continues to yield the usual quantity of mineral for the smelting works.—Returns for June. Ookiep, 2290 tons of 18 per cent. Spectakel, 115 tons of 29 per cent.—Arrival at Swansea. The ss. *Sidney Thomas* with 1500 tons of regulus and 1759 tons of ore.—Tilt Cove, East Mine. Output for June, 4470 tons of 3·50 per cent. wet assay.—Arrivals at Swansea. The ss. *Para* with 1300 tons of ore and 740 tons of regulus, ss. *Hallamshire* with 1490 tons of regulus, and ss. *Ingram* with 1480 tons of regulus and 465 tons of ore.

EAST NIGEL.—Report for fortnight ending July 18: No. 2 incline has sunk 15 feet during the two weeks, making the total depth 170 feet. The drive from the crosscut has been driven a further 15 feet, making a total of 30 feet. The reef in the shaft is improving in quality, assaying from 2 to 4 ounces per ton. In the drive the reef is smaller, and assays from 1 to 2 ounces per ton. The erection of the battery is going on rapidly.

FERREIRA.—The directors have issued the following report on the working operations of the company for the quarter ending June 30:—Expenditure and revenue.—Working expenditure: Mining expenses £29,852 16s. 1d., development redemption 28,911 tons at 5s. £7227 15s.—£37,080 11d. 1d., transport expenses £484 1s. 10d., reduction expenses £8291 14s. 2d.—£45,856 7s. 1d., profit for quarter £84,230 9s. 10d.; total, £130,086 16s. 11d.—Revenue: Gold account £88,214 4s. 3d., cyanide works—profit on working £21,581 8s. 3d., concentrates sold £20,261 4s.; total, £130,086 16s. 11d. General charges £6342 1s. 6d., maintenance £4022 12s. 9d., distributed over mining, transport, and reduction accounts. Mine development account, £6515 18s.—Capital expenditure: Machinery and plant £8293 3s. 4d., buildings £2772 3s. 3d., permanent works £4114 17s. 10d.; total, £15,180 4s. 5d. Average distribution of working expenses: Mining account, 42,141 tons, at 17s. 7·18d. per ton; transport account, 28,911 tons, at 4·02d. per ton; reduction account, 28,911 tons, at 5s. 8·83d. per ton; total, 23s. 8·03d. per ton.—Mine. No. 1 main shaft has been sunk 46 feet, total depth 1323¾ feet. No. 2 main shaft has been sunk 62 feet, total depth 1303 feet.—South reef. The 920 feet level has been extended 102 feet, average width of reef 2 feet 6·63 inches. Average assay value 3 ounces 8·55 dwts. The 1120 feet level has been extended 539½ feet, average width of reef 1 foot 11·46 inches. Average assay value 3 ounces 1·49 dwts.—Main reef leader. The 1120 feet level has been extended 167½ feet, average width of reef 2 feet 6·105 inches, average assay value 19·82 dwts. Two winzes are being sunk in south reef and two in main reef leader. Rock cut during the quarter 1544½ feet.—Mill. Ore crushed 28,911 tons, ore crushed per head per day 4·21 tons, bar gold extracted 24,644·4 ounces, yield per ton 17·013 dwts., concentrates caught 780 tons, assay value of concentrates 7 ounces 1 dwt. 18 grains.—Cyanide works. Tailings treated 22,138 tons, bullion produced 9273·95 ounces.—Sorting. Waste rock picked out during the quarter 13,230 tons.—Dividend No. 11. A dividend of 125 per cent. (25s. per share) has been declared for the half-year ending June 30.

GELDENHUIS ESTATE AND GOLD.—Directors' summary of operations for June: Quartz mined 17,645 tons of 2000 lbs. After sorting and balance in bins the quartz milled (120 heads) was 15,097 tons of 2000 lbs. Yielding smelted gold 5141·15 ounces Tailings treated 8723 tons, 1478·45 ounces. Concentrates treated 680 tons, 270 ounces. Total 6889·60 ounces. Value £22,404 12s. 11d. Cost £12,265 8s. Mining and hauling 8s. 5·56d., transport and sorting 9·93d., milling 2s. 8·17d., general maintenance 3s. 0·11d., charges 9·17d., expended on mine development 2s. 2·65d., total 17s. 11·59d. Cost of producing and treating concentrates £148 15s. 10d., cost of treating tailings £1234 1s. 5d., total £15,925 7s. 11d. Profit for month £6479 5s.—Capital account. Expended on machinery, new shafts, &c. £1334 12s. 1d. Number of feet driven and sunk during month 407¾ feet. The ore developed for the month amounted to 14,986 tons. As there appears to be some misconception in regard to the Chairman's statement at the last annual meeting, and his words have been misconstrued, I am authorised by him to say that when making the statement at that meeting that the mine had been half worked, he intended to convey the fact that it had been opened up to that extent. It is estimated there are some 202,000 tons of ore in the levels above the lowest depth at present attained. There are still some eight levels to be opened up, and which, calculated on the present workable width and average dip of reef—after allowing for faults, dykes, &c., leave 1¼ million tons of reef to be milled in addition to the 202,000 tons above mentioned. Up to the present about half a million tons have been taken from the mine.

GROOTFONTEIN EXPLORATION.—The manager (Mr. C. F. Alston) writes under date July 17 that 11 feet 10 inches was bored during week ending July 11 in blue slate, total depth 95 feet 9 inches.

HARMONY.—Under date July 10 the mining manager of the Harmony Gold and Land Company (Limited) writes:—The outcrop of the Mashambane Reef has been proved to have a width of 80 feet on the level across the reef. After driving 150 feet in the tunnel, which I started 200 feet vertically below the outcrop, I cut through 35 feet of reef matter, panning fairly good gold occasionally, and presumed I had struck the main reef, as I had calculated to do, at 70° south. But, instead, everything tends to prove that the formation dips quite perpendicularly, and, if anything, a little north. This makes it impossible to strike the main reef for some time to come. The manager of the Gravelotte Mine drove through 40 feet of gold bearing reef matter before striking the true reef. I am confident this reef continues through your farm Keulen on the south, your farm Bunn on the south-east, and right through the heart of your farm Sedan, where it has been opened out in a dozen different places. Throughout it is remarkable for its great width. The Gravelotte Gold Mining Company is the only company which has proved this reef to a depth of over 200 feet. It proves there, as greater depth is obtained, to increase in value. Touching the quality of the ore at Mashambane, some parts of the lode yield over 15 dwts. to 1 ounce per ton, but by judicious blending of this with the poorer portions of the ore in the lode a good average yield (say) from 8 to 10 dwts. per ton could be maintained as the supply seems inexhaustible. It can indeed be stated with every degree of confidence that the vast body of medium grade ore found in this lode alone will with moderate outlay furnish a genuine source for a large and profitable mine, and it is not too much to say that there is already sufficient ore located on this lode to maintain at least a treating plant equal to 50 or 60 stamps working for a number of years to come. Cost of mining and treating, including wear and tear of machinery, I estimate at 10s. per ton, owing to the unique position of the mine affording such advantages for cheap working. In the opening speech this session of the First Volksraad, President Kruger gave his word that the railway from Delagoa Bay to this gold field would be proceeded with as quickly as possible, either by the Government or by the contractors. Finally, I beg to heartily congratulate the shareholders of the Harmony Gold and Land Company (Limited) on being in possession of such a magnificent property.

LYDENBURG (Transvaal).—The manager (Mr. J. A. Woodburn) writes under date July 14, as follows:—Sandstone reef. What I take to be the outcrop of this reef has been traced for fully 400 feet on the surface, but it varies so much in width, appearance, and quality, that one cannot at present calculate on any uniformity throughout that distance. I purpose driving along the reef to the north to prove its extent in that direction.

NEW SPES BONA.—The Johannesburg Consolidated Investment Company announce receipt of report for June from the above company containing the following: Development amounted to 390 feet, equal to 7800 tons of ore. There are now 82,809 tons opened up. Main shaft is down 108 feet to next level. It is my intention to sink this 150 feet to 5th level, when crosscutting, &c., will commence upon this level.—Report for week ending July 13 reads as follows: 84 feet developed. All work with the exception of winze stopped for connecting up new head gear. Assays for the week are very satisfactory; one in south reef winze 5th level going 12 ounces. The average over a reef thickness of 1 foot is 2 ounces.

NIEKERK (Klerksdorp).—The following is the manager's report for the week ending July 17:—No. 1 shaft. Drift on clay seam in crosscut north 17 feet driven, total 17 feet. Pump and 140 feet of piping fixed in incline.—No. 2 shaft. Incline 5 feet sunk, total 163 feet down. One set of timber placed.—No. 3 shaft. 5 feet sunk, total 105 feet down. One set of timber placed.—No. A1 shaft. 13 feet sunk, total 137 feet down. One set of timber placed. Total sunk during week, 23 feet; total driven during week, 17 feet; total sunk and driven 40 feet. Mine visited by the State Mining Engineer and Commissioner.—(Signed) Joseph Hassall, manager.

ROODEPOORT.—The Johannesburg Consolidated Investment Company announce receipt of the following report for June from the above company: We milled 3360 tons, or 120 tons, or equal to 3 tons per stamp with a 28 days 22 hours 37 minutes run, and from plates, &c., we recovered 957·47 ounces of smelted gold. The cyanide works treated 2205 tons, yielding 255·95 ounces smelted gold.

WEMMER.—Report for the month of June:—Expenditure and revenue. Expenses, mining. Cost £6795 13s. 1d., cost per ton 18s. 10·353d.; transport cost £326 17s. 4d., cost per ton 1s. 0·138d.; milling cost £1341 4s. 7d., cost per ton 4s. 1·806d.; concentration cost £592 11s., cost per ton 1s. 9·613d.; cyaniding cost £1046 1s. 2d., cost per ton 3s. 2·345d.; maintenance (surface) £44 8s 9d., cost per ton 1·650d.; general charges £613 8s., cost per ton 2s. 0·263d.; redemption £2267 1s.—£12,352 4s. 11d., cost per ton 7s.—38s. 2·893d. Profit for month £3909 3s. 8d., and cost per ton 12s. 1·163d. Total profit £16,261 8s. 7d., and total cost per ton 50s. 3·859d.—Revenue. Gold from mill, 3017·92 ounces, £11,366 2s., value per ton 35s. 2·074d.; gold from cyanide, 1011·13 ounces, £3336 14s. 7d., value per ton 10s. 3·917d.; gold from concentrates (estimated) £1558 12s.; total £16,261 8s. 7d.; value per ton 4s. 9·878d., total value per ton 50s. 3·859d. The cost per ton is worked out on the basis of the tonnage milled.—Capital expenditure, Development, 751 feet, driven, sunk, and risen £2175 7s. 8d., main shaft £15 1s. 7d., buildings and improvements £576 7s. 3d., machinery and plant £762 8s. 1d.—£3529 4s. 7d., less development redemption £2262 1s.—£1267 3s. 7d.—Output. Mill 3071·92 ounces, cyanide works 1011·13 ounces, concentrates (estimated) 547·50 ounces—4630·55 ounces.—Crushed during the month. South reef 2262·696 tons, 35·01 per cent., main reef leader 4192·549 tons, 64·87 per cent., main reef 7755 tons, 00·12 per cent.—Mining and development Feet driven, sunk, and risen 751 feet, ore opened up by development 23,610 tons, ore mined 9184 tons, clean ore for the mill 6550 tons, waste picked out 1634 tons.—Reduction. 50 stamps ran 28 days 16 hours 10 minutes. Ore milled 6461 tons, duty per stamp per day 4·407 tons, yield of bar gold 2671·92 ounces, yield per ton crushed 9·506 dwts.—Cyaniding. Tailings treated 4375 tons, yield of bullion 1011·13 ounces, yield per ton treated 4·148 dwts.—Concentration. Tonnage caught 146 tons, average assay value 3·75 ounces, fine gold per ton of ore milled 1·694 dwts.—Yield (fine gold) per ton treated. By amalgamation 8·212 dwts., by concentration 1·694 dwts., by cyanide 2·471 dwts., total extraction per ton 12·377 dwts.

MISCELLANEOUS.

ALMADA AND TIRITO.—Report for the fortnight ending July 11: Drivages. Ibarras tunnel driving south is still without ore; the western wall is well-defined. The lode in the 150 feet south of Taylor's shaft is yielding 3¼ tons of ore to the fathom; last assay value was 66 ounces of silver per ton; the forebreast has a good appearance. The 150 feet north of Taylor's shaft continues to yield some good stones of green ore; both walls are well-defined. In the 150 feet south of Wilde's shaft the lode has undergone no change; small quantities of green ore are still being broken. The lode in the 150 feet north of Wilde's shaft has decreased in value, and is at present only worth 1 ton of ore to the fathom, but as the indications are fairly good, I am hoping that it may improve again soon. Last assay value was 63 ounces of silver per ton.—Shafts. Taylor's shaft sinking below the 150 feet level has again become poor and unproductive. The lode in the bottom of Wilde's shaft sinking below the 150 feet level is of a hard nature, and the indications are favourable. It is at present worth ¼ ton of ore to the fathom.—Stopes. These are yielding small quantities of good grade ore.—James Pellow.

CARIBOO.—The following information has been received from the company's agent at Barkerville: Have cleaned up "eye-opener" 55 ounces. Gravel is looking first rate, expect next clean up will be very good. 12-inches pipe line and new monitor for "eye-opener" has been delivered, and is now being fixed into position, hope to have all completed very shortly and shall have good results. Have resumed work on drain tunnel, all water has drained out, do not expect any more trouble. Contract for haulage of large pipe line from Ashcroft has been arranged with the B. C. Express Company and is now being proceeded with. Chinese contractor is completing the last length of ditching from Lightning Creek to Jack of Clubs. Everything satisfactory.

PESTARENA.—W. H. Trelease, T. H. Messa, August 5: The 33 level east on No. 2 lode has improved during the last few days, and now yields 2 tons of ore per fathom at 2 ounces per ton. At the 46 east on Pozzone lode good progress has been made in driving. The lode is 90 centimetres wide, carrying a branch of quartz and pyrites on the hanging wall. The 46 east on counter lode is suspended and the men put to stope in the back to prove the lode there. The 46 east on No. 1 lode is yielding 2 tons per fathom at 1 ounce 10 dwts. The lode maintains its size—70 centimetres—but seems to be entering the poor section of ground passed through in the 55 level. There is no change to report in the crosscuts.—Stopes on No. 1 lode. At the 46 east two stopes are yielding 6 tons at 2 ounces, and 5 tons at 2 ounces respectively. At the 55 two stopes yield 6 tons at 2 ounces and 4 tons at 1 ounce 10 dwts. At the 70 two stopes are giving 9 tons at 2 ounces and 6 tons at 2½ ounces, and one at the 30 east 5 tons at 1 ounce 10 dwts. On the counter lode at the 46 a stope yields 2 tons per fathom at 1 ounce, and at the 70 west on A and B lodes a stope is yielding also 2 tons per fathom at 1 ounce per ton.—Stabioli. In the end driving north from crosscut the lode at present is 1 metre wide, carrying a branch of quartz thinly charged with fine pyrites for 20 centimetres on the hanging wall.—Kint. The sinking of the Quarazza winze has been retarded by water resulting from heavy rains, but is being pushed on as fast as possible under the circumstances. The end west on Oro Secco lode shows the lode to be wide and mineralised throughout, and carrying more pyrites than formerly. The end east on Depaulis lode has improved, and is now carrying a branch of almost solid pyrites on the footwall. At Pozzone the pump was restarted on July 29, but the forking has been slow owing to the rains. All the machinery is running satisfactorily.

CHAFFERS.—The following report, dated July 1, has been received from the company's manager, Messrs. Bowes Scott and Co., Coolgardie: We wired you to-day. Have commenced sinking winze in level, fairstone is equal to an average of 1 ounce. The winze referred to is in the north end of the level driven from No. 1 shaft. The lode in the winze, which is about 10 feet deep, is about 2½ feet wide, and we have picked up several stones in which gold was visible, minute specks, but still decidedly encouraging.

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices, Liskeard, Cornwall, writes (August 13):—There is no improvement to notice in prices during the week. Market continues dull and neglected, with less confidence in the future of tin. Quotations:—Basset United (Limited), 16s. to 17s. 6d.; ditto (5s. paid), 4s. 6d. to 5s.; Blue Hills, 1s. 6d. to 2s.; Carn Brea United (Limited), 2s. to 2s. 6d.; Devon Consols, 19s. to 20s.; Dolcoath (Limited), 19s. to 20s.; ditto (7s. 6d. paid), 6s. to 6s. 6d.; East Pool, 1⅞ to 2; Killifreth (Limited), 1s. 6d. to 2s.; Levant, 4 to 4¼; Polberro, 7s. 6d. to 8s. 6d.; West Kitty, 2¼ to 2⅜; Wheal Grenville, 6⅜ to 6½; Wheal Kitty, 5s. to 6s.

Messrs. ABBOTT and WICKETT, Stock and Share Brokers and Mining Share Dealers, Redruth, write under date of August 13:—Dolcoaths have been enquired for, but other shares have been quite neglected. Quotations herewith:—Blue Hills, 1s. to 2s.; Basset Mines, ⅜ to ½; Carn Brea, ⅛ to ⅜; Dolcoath (fully paid), 19s. to 20s.; ditto (7s. 6d. paid), 6s. to 7s.; East Pool, 2 to 2⅛; Killifreth, ⅛ to ⅜; Polberro, ¼ to ½; South Crofty, ⅛ to ¼; Tincroft, ⅛ to ⅜; West Kitty, 2¼ to 2⅜; Wheal Grenville, 6¼ to 6⅜; Wheal Kitty, ⅛ to ¼; Wheal Metal (3s. paid), 3s. 6d. to 4s.

MANCHESTER.

Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market street, write August 13 (noon):—Markets generally are steadier after the heavy decline of last week, and although there are several adverse changes to record both in English and American rails, prices taken as a whole are apparently better than the worst which were touched on Monday morning, when something near a panic looked like setting in. About noon, however, a change for the better came over the market, and the public, evidently beginning to think that too much had been made of the situation, began to send buying orders, which, coupled with "bear" covering, caused a sharp rise in Americans, with the result that fixing prices in Americans, on Tuesday, were in several instances $2 to $3 above the lowest points reached on the previous day. In English rails changes are on balance somewhat evenly divided, and the dividends being off one or two of the heavies begin to make them look cheap again, especially so in face of continuance of the splendid traffics. In foreigners South Americans eased, though finishing above lowest, whilst some European stocks have advanced slightly. Consols have declined ⅛ to ⅜, and New South Wales, 1918 issue, 1½. Other changes are recorded below:—

ENGLISH RAILS.—Higher: Caledonians, ½; Lancashire and Yorkshire, ⅜; Brighton A, ¼; London and North-Western, ¼; Midlands, 1; Dover A, ⅜.—Lower: York Deferred, 1½; Great Westerns, 1; Chathams, ½; Saras, ¼ to ⅜; Districts, ⅜; Berwicks, ¼; North British, ⅜.

CANADIANS AND AMERICANS.—Higher: Atchison Income Bonds ¼; Trunk First, ⅜; New York Centrals, 1 to 1⅛; Norfolk Preference ⅛.—Lower: Atchisons, ⅜; Canadian Pacifics, ½; Milwaukees, 2¾; Denvers, ¼ to ½; Denver Preference, ½; Louisvilles, 1⅜; Eries, ⅜ to 1; Readings, 1; Union Pacifics, ⅛.

CONSOLS.—Lower: Two and Three-quarters per Cent., ¼ to ⅜.

COLONIAL STOCKS, &C.—Lower: New South Wales, 1918, 1½.

CORPORATION STOCKS AND DEBENTURES.—Higher: Birmingham Three per Cent., ½; Bristol Three and a-Half per Cent., 1; Manchester Three per Cent., ⅛.

FOREIGNERS.—Higher: Portuguese Three per Cent., ⅛; Turks "D," ⅛.—Lower: Argentine Six per Cent., 1; Argentine Five per Cent., 1; Spanish Four per Cent., ⅛; Uruguay Three and a-Half per Cent., ⅛.

BANKS.—Higher: Adelphi, ⅛; Imperial Ottoman Bank, ⅛; Parr's, ⅛ to ¼; Union of Manchester, ⅛.—Lower: District, ⅜; Mercantile of Lancashire, ⅛.

INSURANCE.—Higher: Lancashire and Yorkshire Accident, ⅛; Thames and Mersey, 1-16.—Lower: Liverpool, London, and Globe, ⅛; Manchester Fire, ⅛ to ¼; Royal, ⅜; Sea, 1-16.

COAL, IRON, &C.—Higher: Bolckow Vaughan (£20 paid), ⅜; ditto, ditto, (£12 paid), ⅛.—Lower: Cammells, ½; Parkgates, ¼; Sheepbridge "A," ⅜; Wigan Coal, ⅛.

TELEGRAPHS AND TELEPHONES.—Unchanged.

BREWERIES.—Higher: Allsopps, 1½; Boddingtons, ¼; Chester's, ⅛; Farnham, ⅛.—Lower: Guinness, 25 to 35; Parker's, ⅛; Threlfalls, 1.

MISCELLANEOUS.—Higher: Bovril, ¼; Chadwicks, ⅛ to ⅜; Hudson's Bay, ¼; Kellner Partington, 1-16; Edison Swans, ⅜; Salt Union, 1-16; Manx Trams, 6d.; Manchester Carriage "C," ⅛.—Lower: Blackpool South Shore Pier, ⅛; Blackpool Tower, 6; Blackpool Winter Gardens, ¼; Bradbury and Co., ⅛ to ⅜; Brunner Mond, ⅜ to ½; Cunard Steam, ⅛; Pacific Steam, ⅜; Rylands, ¼; United Alkali, 3 16 to 5-16; Sir J. Whitworth, ⅛; Northern Assets, 1s. 6d.; Suez Canal, 1.

LATER, 4.0 p.m.—Few changes have occurred in home rails, Districts having exceptionally fallen ⅜. Americans, though very little business has taken place, have ruled pretty firm all day. Trunks and Mexicans hardly altered.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironbroker (August 13), writes:—During the past week there has not been much business doing owing to the holiday season, but trade prospects are still considered favourable.

In shares of coal, iron, and steel companies the movements are irregular. The dividend on Stewart and Clydesdale Ordinary shares is announced at 7 per cent., payable August 28. Marbella are at 36s. 6d. Steel Company of Scotland improved to 5 7-16, and are now 5 5-16, Niddrie, 38s. to 39s.

In shares of copper concerns prices are easier in sympathy with the market for the metal. Arizona touched 52s. 6d., Tinto 22, and Tharsis £5 10s., but all show a slight recovery.

In shares of gold and silver mines there has been more business doing. South African shares have been in better favour owing to the Witwatersrand output for July forming a new record of 203,873 ounces, and owing to the series of defeats of the rebels in Rhodesia. Chartered shares improved from 52s. to 58s. 9d., and are now 57s. 6d. Consolidated, East Rand, and Randfontein are all better. Sheba have not altered much, although it is announced a rich body of ore has been struck at the mine. Henry Nourse shares higher on the increased output for July. Silati River and Wolverand Gold shares offered. African Recovery are at 37s. 9d., Associated (W.A.), 73s. 9d.; Aladdin's Lamp, 53s.; Associated Southern, 33s. 9d.; African Estate, 36s. 6d.; Afrikander, 37s.; Brilliant and St. George, 31s. 3d.; Bayley's Reward, 6s.; Broken Hill, 50s.; Block B, 36s. 3d.; Brownhill Proprietary, 11s. 6d.; Brookman Brothers and Boulder, 27s. 6d.; Big Blow, 6s. 6d.; Brownhill Central, 4s. prem.; Cassel, 17s.; Chaffers, 6s. 9d.; Central Exploration W.A., 22s. 6d.; Croydon Consols, 5s. 6d.; Central de Kaap, 9d.; Day Dawn P.C., 3s. 3d.; East Sheba Reefs, 3s. 3d.; Emma, 2s. 3d.; Exploring Land and Minerals, 24s. 6d.; Gordon Diamond, 9d.; Hannan's Napier, 20s.; Hauraki Associated, 5s.; Hit or Miss, 46s. 3d.; Hampton Plains, 93s. 9d.; Hainault, 62s. 6d.; Irene Hauraki, 5s. 3d.; Jay Hawk, 1s.; Lake View South, 61s. 3d.; Lake View and Boulder Junction, 21s. 3d.; Lisbon Berlyn, 6s. 3d.; Lindsay's, 6s.; Langlaagte Star, 27s. 6d.; Montana, 4s. 9d.; Murchison New Chums, 7s. 6d.; North Boulder, 31s. 6d.; Nigel Deep, 31s. 3d.; Ophir Concessions, 1s. 6d.; Paddington, 38s. 9d.; Pardy's Mozambique, 25s.; Paarl Central, 23s. 9d.; Poorman, 9d.; Rhodesia (Limited), 22s. 6d.; Sam's Wealth of Nations, 3s. 6d.; Sutherland Reefs, 1s. 3d.; Springdale, 1s. 6d.; Silati River, 10s.; Spes Bona, 30s.; Town Properties (W.A.), 26s. 3d.; True Blue, 18s. 9d.; Violet, 22s. 6d.; Willoughby, 31s. 3d.; Wentworth, 18s. 9d.; and Woodstock Transvaal, 31s. 3d.

In shares of miscellaneous companies there has not been much business doing. Oil companies' shares are generally lower on unexpected reduction of ½d. per gallon on burning oil. Broxburn are at 9; Pumpherston, 7; and Young's, 30s. Lawes' Chemical are at 6 and 6½. Nobel's Dynamite have improved to 18⅜.

EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, 69, Hanover-street, Edinburgh, report as follows under date of August 13:—Since last week's report rumours of labour difficulties in the West have had an adverse influence on prices of the leading Scottish railway stocks. Caledonian Deferred has declined from 62⅜ to 62, North British from 50⅜ to 49⅞, Glasgow and South Western from 142 to 138⅜. In insurance shares, Life Association have declined from 42 to 41, North British and Mercantile from 39½ to 39, Royal from 54½ to 54, Standard Life from 55½ to 55. Scottish Union A from 92s. 9d. to 92s. 6d. In banks, Union has receded from 23 3-16 to 23 1-16, Royal from 236 to 235½. The uneasiness in American financial circles on the silver question has depressed American railways, and has even influenced prices of such shares as Scottish American Investment and Scottish American Mortgage, which have fallen, the former from 62s. 9d. to 60s., and the latter from 47s. 6d. to 45s. 6d. Fife Coal shares have gone down from 17½ to 16⅝. Arizona Copper from 56s. 6d. to 53s. 6d., Rio Tinto from 22⅜ to 22⅛, Tharsis from 112s. to 111s. Steel Company of Scotland shares have gone up from 5 to 5 7-16, Broken Hill from 49s. 3d. to 50s. J. and P. Coats' shares have changed from 66 9-16 to 65⅞, Edinburgh Street Tramways from 75s. to 72s. 9d., Scottish Assam Tea from 10⅜ to 10⅞.

Messrs. BARRY, HEAD, and Co., iron and steel merchants, weekly report dated August 13.—Prices remain steady to stiff at last reported figures, and in our opinion the tendency is still upwards. There is more disposition to buy ahead, and more doing in finished goods, while shipments and home consumption of pig iron are most satisfactory.

MINING IN CORNWALL AND DEVON:

NOTES ON MINING IN THE WEST.

(FROM OUR OWN CORRESPONDENT.)

THE week has been barren of any particular excitement in regard to Cornish mining, and the attitude of those interested in it seems just now to be a very passive one. So marked, indeed, has this attitude become that there is some reason to fear harmful results. It has become the habit of nine out of ten, when catechised as to the position of the industry, to reply that "Cornish mining will come again when tin goes up." No doubt! But we were under the impression that with the new era of Limited Liability and the available capital, there was to be a spirited attempt to meet the diminished price with a largely augmented output. This policy is, we know, in process of adoption in one or two of the mines, but it is high time we heard less of the price of tin, and more of attempts to meet the competition of lower values. It is, of course, practically certain that tin will rise again at some time or other, but there was never a more apt illustration of the horse starving while the grass is growing than in the condition of the industry at the present moment. It is time for some of the mines which have been lingering on for the past few years to either shut up altogether, or else for the shareholders to make up their minds to remodel their plans. We should like to see a comparison of the amount of stuff raised per day by half-a-dozen mines in Cornwall and half-a-dozen mines in the Transvaal. The produce of many mines in South Africa is not of greater value per ton than Cornish tinstuff, but it is in the automatic treatment of the very large quantities of stuff that the gold mines have proved successful, and it will be the same policy which will make the future of Cornwall. The policy of Dolcoath has been to raise bigger quantities, and even so far as it has gone it has proved successful. The aim of Basset directors is to raise 1000 tons a day, and if only some of the other mines will adopt the same principle, remodel their drawing gear, and improve their shafts, they will find it much more easy to compete with the Straits than by waiting for so uncertain a factor as an augmented price. That shareholders and mine managers are aware of the importance of such a step is proved by the glib and frequent manner in which it is spoken of, but it is high time that the smaller concerns commenced to put the principle into practice. Where, in all this depression, has been the Mining Association and Institute of Cornwall? We should have imagined that this organisation would have been the medium of an interchange of opinions as to ways and means of meeting the difficulties of the situation, and might have been utilised by the mine managers as the medium of conveying to the public the possibilities of the industry with a sufficient capital outlay. But the Association has never once met, or, if it has, its discussion has not been conveyed to the public. We do not want these remarks to be misinterpreted; we are fully aware and much appreciate the wonderful improvement which has been effected in the working of some of the mines and their financial basis, but we desire to see a little more activity, and the exhibition of more self-reliance.

SOUTH CONDURROW, whose meeting was held in Cornwall on Wednesday, has up to now tided over the depression as well as any mine, and Captain Rich is to be congratulated on the manner in which it has been kept afloat. The losses have been very small indeed; had they been otherwise it would quickly have been "scat," but there is some hope that it may yet return to its old prosperity. Obviously, the proper thing to do, however, is to endeavour to reconstruct; to convert into Limited Liability, and to utilise a large portion of the capital in improving the winding gear, so as so as to draw up more stuff, to resume their explorations westward, and to obtain a small extension of their sett eastward, so that they might continue their levels in that direction for some further distance. They have a remarkably good list of shareholders, who would form the nucleus of a strong company, and probably nearly all of them would take *pro rata* shares in a new company, because the calls would only be made at intervals, and their liability would be much more limited than it is at present. It would be a much preferable policy of pottering along as they are now. Some idea of the character of their shareholders may be gathered from the fact that the only amount due on arrears of calls on effective shares is £3 9s. There are one or two other amounts due on forfeited shares, but the whole comes to considerably less than £100.

No one will be surprised to hear that Captain Rich has contemplated retiring from the management of the mine, although there is no sign of failing health. Captain Rich has come to the conclusion that after being accustomed to going underground for over 60 years, the time has arrived when he might claim a rest. For the time, however, he will retain the management, and whether he retires from the position he now holds or not, he will probably continue closely associated with it. He has been connected with a great many concerns in the county during his career, among the last of which we remember West Basset, Blue Hills, and Pednandrea.

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COLORADO MINING AND OTHER INVESTMENTS.

THOMAS TONGE, DENVER, COLORADO.
SPECIALITIES—Gold Properties; Leasing and Development Syndicates.
CABLE: "TONGE, DENVER." Code, "A. B. C.," Fourth Edition.

BOARD OF TRADE RETURNS.

JULY TABULAR STATEMENT.

Specially compiled for "The Mining Journal" from the Board of Trade Returns.

THE Returns for July show that the Imports amounted to £34,382,850, a *decrease* of £714,864, and that the Exports totalled £22,334,785, an *increase* of £775,299, compared with the corresponding month last year. For the seven months ended July 31, the Imports were £250,834,885, an *increase* of £12,049,421, and the Exports £140,337,577, an *increase* of £13,660,505 compared with the corresponding period of 1895. The Exports of Foreign and Colonial Merchandise show a *decrease* of £515,125 for the month, and £407,830 for the seven months, the totals being £4,274,636 and £34,213,475 for the one and seven months respectively.

EXPORTS:—SUMMARY OF INCREASES AND DECREASES.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES. INCREASE.	QUANTITIES. DECREASE.	VALUE. INCREASE	VALUE. DECREASE.
Raw Materials:				
COAL and Patent Fuel ... Tons	—	231,379	—	169,058
COAL, &c., shipped for steamers' use ... ... Tons	45,712	—	—	—
Metals:				
BRASS, and manufactures of Cwts.	253	—	420	—
COPPER, unwrought and wrought ... ... Cwts.	—	17,493	—	16,056
HARDWARE and cutlery £	—	—	17,263	—
IMPLEMENTS and tools, and parts thereof ... £	—	—	20,144	—
IRON, unwrought and wrought Tons	41,229	—	398,873	—
LEAD, pig, rolled, &c. ,,	69	—	3,632	—
PLATE, and plated gilt wares £	—	—	2,473	—
TELEGRAPH WIRES, &c. £	—	—	—	29,782
TIN, unwrought ... Cwts.	—	2,915	—	10,638
ZINC or SPELTER ... ,,	—	3,836	—	2,541
OTHER ARTICLES ... £	—	—	15,096	—
			497,935	59,317
			59,317	—
Total	—	—	398,618	—
Machinery:				
Steam engines	—	—	29,637	—
Other descriptions	—	—	189,196	—
			218,833	—
			—	—
Total	—	—	218,833	—
ALKALI ... ... Cwts.	—	139,834	—	25,169
CEMENT ... ... Tons	—	8,021	—	11,642
PRODUCTS OF COAL ... £	—	—	1,359	—

EXPORTS:—BRITISH AND IRISH PRODUCE.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES. Month ended July 31. 1895.	1896.	VALUES. Month ended July 31. 1895. £	1896. £
Metals and Articles Manufactured therefrom (except Machinery):—				
Brass, and Manufactures of, not being Ordnance	Cwts. 9,290	9,543	37,392	37,812
Copper: Unwrought, in Ingots, Cakes, or Slabs, and Precipitate:				
To Germany	13,680	10,990	29,838	27,462
,, Holland	10,333	7,788	23,254	20,048
,, Belgium	2,429	301	5,421	778
,, France	9,423	10,574	21,759	27,338
,, Italy	747	1,500	1,805	3,938
,, British East Indies ...	63	41	139	108
,, Other countries	8,543	7,945	18,905	19,938
Total	45,209	39,139	101,121	99,619
Wrought, or Manufactures, unenumerated:				
To Sweden and Norway ...	909	1,948	2,792	6,348
,, Germany	550	1,157	1,568	3,419
,, Turkey	2,696	1,921	7,348	5,777
,, Egypt	858	462	2,113	1,355
,, Brazil	1,537	2,100	4,189	6,335
,, British East Indies ...	5,229	3,229	12,576	9,581
,, Australasia	1,519	769	4,587	2,534
,, Other countries	7,233	6,532	20,376	21,174
Total	20,541	18,128	55,549	56,513
Mixed or Yellow Metal:				
To China and Hong Kong ...	854	713	1,815	1,745
,, British East Indies ...	9,810	569	19,631	1,359
,, Other countries	5,629	6,013	13,337	15,340
Total	16,295	7,285	34,753	18,444
Total of Copper	82,045	64,552	191,423	174,567
Hardware and Cutlery ...	—	—	155,295	172,555
Implements and Tools, and parts thereof	—	—	108,186	128,330
Iron and Steel: Pig-iron:	Tons.	Tons.	£	£
To Russia	24,746	7,241	54,267	18,297
,, Sweden and Norway ...	3,071	2,432	8,013	5,363
,, Denmark	842	3,022	2,650	8,746
,, Germany	24,991	26,905	47,476	55,700
,, Holland	8,904	13,737	19,192	32,058
,, Belgium	2,776	6,570	8,102	18,870
,, France	4,283	2,546	9,767	6,210
,, Portugal, Azores, & Madeira	325	295	1,746	633
,, Spain and Canaries ...	306	284	1,465	1,087
,, Italy	8,135	6,683	19,472	14,462
,, United States	2,484	2,423	17,438	11,903
,, Australasia	3,905	2,088	7,738	5,156
,, British North America ...	1,764	749	5,186	2,416
,, Other countries	6,099	10,145	12,693	22,221
Total	92,491	85,090	213,180	198,122
Bar, angle, bolt, and rod ...	14,697	15,952	82,075	99,201
Railroad of all sorts	47,343	69,865	159,987	423,332
Wire, iron and steel &c. ...	3,427	4,909	57,715	74,393
Hoops, plates, boiler plates, &c.	12,504	14,648	101,824	102,811
Galvanised sheets	18,472	18,416	198,887	215,736
Cast and wrought iron, &c. ...	25,146	28,792	322,002	354,970
Old, for re-manufacture ...	15,087	12,366	38,522	37,629
Steel, unwrought	17,058	20,887	179,222	195,147
Black plates for tinning ...	3,338	4,065	32,634	38,944
Manufactures of steel, or of iron and steel combined ...	1,531	5,510	43,003	146,763
Total of iron and steel (including tin plates and sheets)... ...	280,762	326,991	1,114,818	2,213,696
Tin Plates and Sheets:				
To Russia	5,027	1,162	55,411	14,076
,, Germany	285	1,589	3,669	18,418
,, Holland	847	858	8,872	11,529
,, France	170	814	2,152	10,069
,, Portugal, Azores, and Madeira	226	215	2,729	2,789
,, Italy	83	124	951	1,446
,, Roumania	365	483	3,469	5,06
,, United States	16,445	13,930	188,318	157,573
,, Brazil	336	568	3,681	5,938
,, Argentine Republic ...	223	381	2,316	3,912
,, British East Indies ...	815	2,631	9,532	32,071
,, Australasia	1,738	1,302	20,207	14,348
,, British North America ...	1,213	987	13,588	9,681
,, Other Countries	1,856	1,384	21,680	15,734
Total	29,788	26,491	340,772	303,688
Lead: Pig Sheet, Piping, and Manufactures;	Tons.	Tons.	£	£
To Russia	1,528	1,285	15,919	21,132
,, Germany	147	33	1,581	393
,, China and Hong Kong ...	209	84	2,324	1,081
,, Japan	131	240	1,745	2,857
,, United States	618	2	6,151	27
,, British East Indies ...	377	495	5,698	6,529
,, Australasia	75	44	875	537
,, British North America ...	280	75	3,014	920
,, Other countries	559	1,153	6,773	13,776
Total	3,928	3,994	44,020	47,682

BRITISH AND IRISH PRODUCE—*Continued.*

PRINCIPAL AND OTHER ARTICLES	QUANTITIES. Month ended July 31.		VALUES. Month ended July 31	
Plate & Plated & Gilt Wares	—	—	28,104	30,579
Telegraphic Wires, & apparatus connected therewith ...	—	—	52,421	55,1 9
Tin, Unwrought:	Cwts.	Cwts.	£	£
To Russia	2,583	1,759	8,763	5,764
,, Sweden and Norway ...	226	211	933	691
,, Germany	704	587	2,344	1,791
,, France	1,175	756	3,902	2,603
,, Turkey	280	779	964	2,573
,, United States	545	—	1,933	—
,, British North America ...	816	551	2,787	1,796
,, Other countries	4,011	2,863	13,619	9,389
Total	10,400	7,485	35,245	24,607
Zinc or Spelter: Unwrought and Wrought	14,266	10,430	10,279	7,738
Total of Principal Articles ...	—	—	2,507,183	2,890,705
,, other Articles	—	—	58,235	73,331
Total of Metals and Articles Manufactured therefrom (except Machinery)	—	—	2,565,418	2,964,036
	Tons.	Tons.		
Alkali	491,591	351,753	120,881	95,712
Cement	40,621	32,600	65,533	53,911
Products of coal (including paraffin, petroleum, &c.) ...	—	—	110,603	111,962

MACHINERY.

Mining: (Not Steam Engines.)	July, 1895	July, 1896	7 months '95	7 months '96
To Countries in Europe ...	£ 1,732	£ 4,510	£10,715	£17,305
,, United States	121	—	1,553	1,189
,, Countries in South America	2,851	4,991	16,656	24,971
,, British Possessions in S. Africa	35,747	35,118	243,909	359,935
,, ,, East Indies	2,931	9,709	20,869	34,661
,, Australasia	4,234	27,694	38,958	155, 47
,, Other Countries	5,269	3,268	26,195	27,999
Total	52,938	85,190	358,445	632,227
Total of Machinery other than Steam Engines	1,061,116	1,250,312	6,950,283	7,905,774
Total of Steam Engines ...	272,775	302,412	1,523,433	1,943,794
Total of Machinery and Mill Work	£1,333,891	£1,552,724	£8,473,716	£9,849,568

EXPORTS OF FOREIGN AND COLONIAL MERCHANDISE.

PRINCIPAL ARTICLES.	QUANTITIES. Month ended July 31 1895	1896	VALUES. Month ended July 31. 1895	1896
Copper:	Tons.	Tons.	£	£
Unwrought and part wrought	480	957	21,639	49,297
Iron and Steel:				
Bar, angle, bolt, and rod ...	2,153	1,699	16,161	12,304
Steel, unwrought	271	498	2,158	4,058
Manufactures:				
Girders, beams, and pillars ...	35	89	411	672
	Cwts.	Cwts.		
Unenumerated	52,738	71,074	49,657	117,478
	Gals.	Gals.		
Petroleum	78,304	91,900	2,965	3,557
Quicksilver	Lbs. 255,532	Lbs. 140,268	23,850	11,806
	Cwts.	Cwts.		
Saltpetre	2,634	1,461	1,975	1,127
Tin, in blocks, ingots, bars, or slabs	47,789	18,784	152,681	57,424

IMPORTS.

SUMMARY OF INCREASES AND DECREASES.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES. Increase.	QUANTITIES. Decrease.	VALUE. Increase.	VALUE. Decrease.
Metals:			£	£
COPPER: Ore ... Tons	6,699	—	17,347	—
Regulus ... ,,	—	2,361	—	52,770
Unwrought and part wrought	1,670	—	98,235	—
IRON: Ore ... ... ,,	159,298	—	123,331	—
Bar ... ... ,,	—	1,733	—	13,870
Steel, unwrought ,,	523	—	7,165	—
LEAD: Pig and sheet ... ,,	68	—	15,624	—
PYRITES of iron or copper ,,	—	9,843	—	28,004
QUICKSILVER ... Lbs.	—	34,370	—	3,460
SILVER ORE	—	—	—	27,034
TIN, in blocks, &c. ... Cwts.	—	22,940	—	81,285
ZINC, crude ... ... Tons	—	307	10,111	—
OTHER ARTICLES	—	—	59,112	—
			301,995	246,424
			246,424	—
Total	—	—	55,571	—
Chemicals:				
ALKALI ... ... Cwts	—	3,454	—	4,497
BRIMSTONE ... ... ,,	—	—	—	—
SALTPETRE ... ... ,,	27,500	—	6,974	1,117
Iron Manufactures:				
Beams, girders, &c. ... Tons	559	—	—	—
Unenumerated ... Cwts.	39,001	—	148,047	—
ZINC MANUFACTURES ... ,,	—	3,451	—	926

FOREIGN AND COLONIAL PRODUCE.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES. Month ended July 31 1895.	1896.	VALUES. Month ended July 31. 1895.	1896.
Copper:	Tons.	Tons.	£	£
Ore:—From Spain	152	993	450	2,412
,, Italy	602	640	3,012	2,200
,, United States ...	52	94	1,125	2,1 0
,, Venezuela	—	—	—	—
,, Chili	1,596	872	13,575	9,980
,, Cape	4,177	1,760	42,770	1 ,600
,, British N. America ...	2	7,430	3	20,779
,, Other countries ...	1,823	3,424	6,436	28,637
Total	8,504	15,203	67,371	84,718
Regulus and Precipitate:				
From Portugal	1,100	954	32,500	30,975
,, Spain	4,424	3,381	130,183	82,191
,, United States ...	1,958	1,324	5 ,611	38,793
,, Chili	146	216	3,810	5,700
,, Other countries ...	2,931	2,323	39,717	47,892
Total	10,559	8,198	257,821	205,051
Unwrought and part Wrought:				
From United States ...	803	2,283	34,728	110,501
,, Chili	1,353	1,560	58,610	78,470
,, Australasia	610	614	25,699	31,508
,, Other countries ...	244	223	10,277	10,078
Total	3,010	4,680	130,324	228,559
Iron and Steel:				
Iron ore { From Spain ...	386,028	495,260	249,957	324,645
Iron ore { Other countries	54,105	104,171	42,913	91,556
Total	440,133	599,431	292,870	416,201
Iron, bar, angle, bolt, & rod...	7,897	6,144	63 267	49,397
Steel, unwrought	984	1,004	6,336	13,501
Lead, pig and sheet ... or	14,935	15,603	149,392	165,086
Pyrites of iron or copper sulphur	57,600 Lbs.	47,820 Lbs.	106,644	78,640
Quicksilver	59,260	33,890	6,676	3,178
Silver Ore	—	—	169,771	102,737
Tin, in blocks, ingots, bars, or slabs:	Cwts.	Cwts.		
From Straits Settlements ...	64,780	39,543	207,512	119,249
,, Australasia	3,460	5,340	11,158	19,705
,, Other countries ...	3,744	3,161	10,197	8,807
Total	71,984	49,044	228 867	147,581
Zinc, crude in cakes ... Tons	8,925	8,618	95,723	95,834
Total of principal articles ...	—	—	1,567,022	1,992,481
,, other articles	—	—	198,029	228,141
Total of metals	—	—	1,765,051	1,840,622

SALES BY AUCTION.

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REPORTS AND EXAMINATIONS ON MINES

References: The Columbia University School of Mines, New York, and the Bank of Telluride, of Telluride, Colorado.

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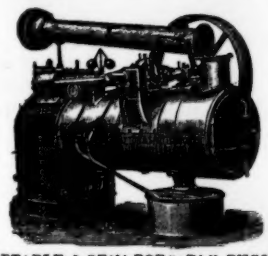
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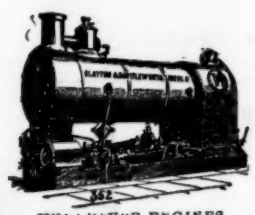
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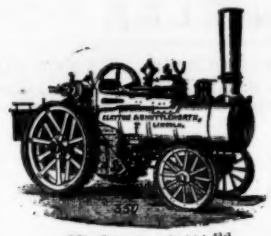
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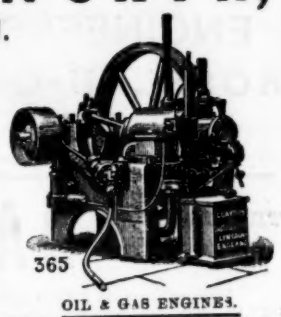
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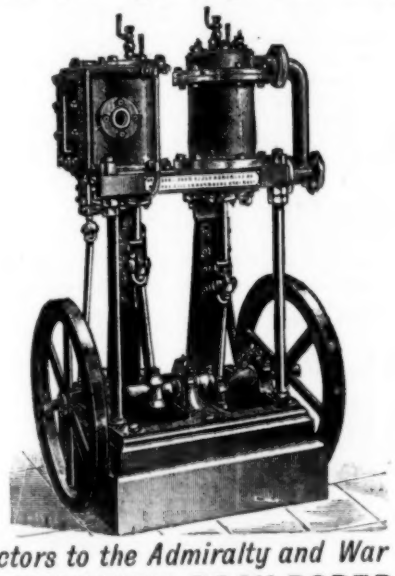

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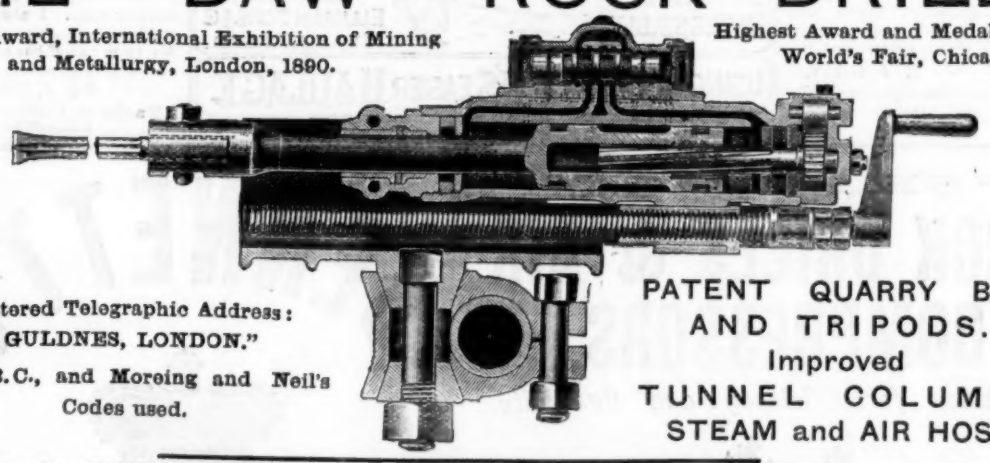

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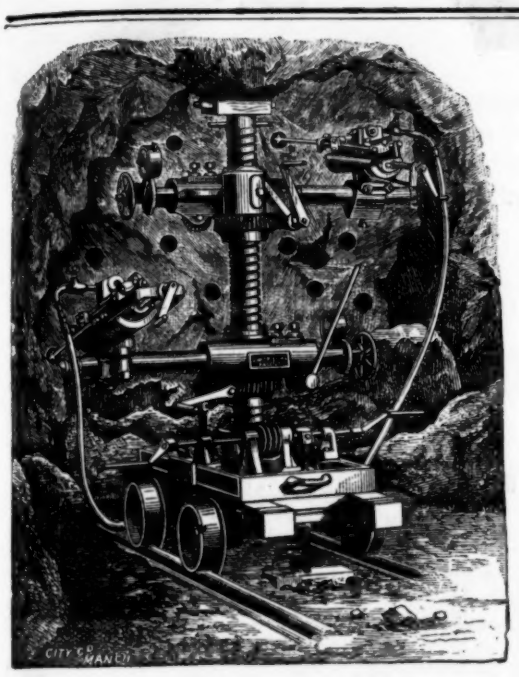

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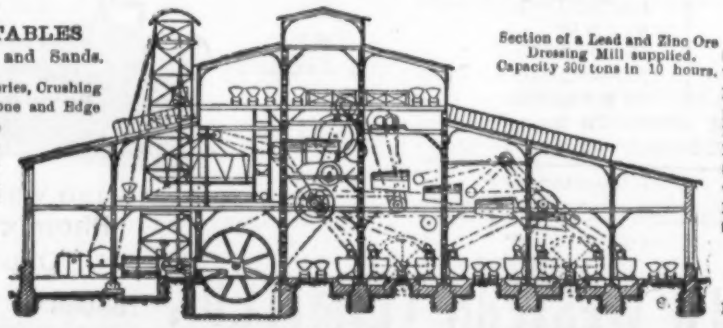

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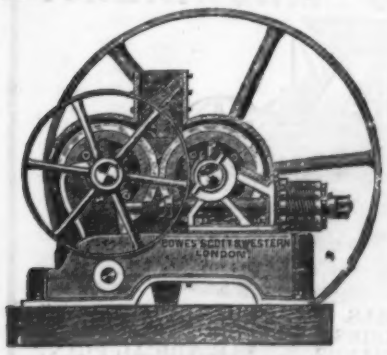

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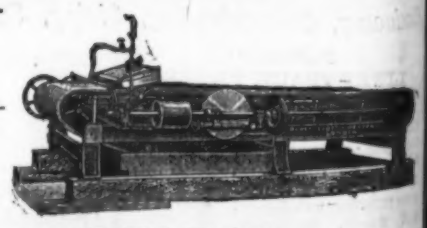

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